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FINANCIAL CONSIDERATIONS OF SOUTH AFRICAN COMPANIES MAKING CAPITAL INVESTMENTS ABROAD: A THEORETICAL AND EMPIRICAL STUDY

BY

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DECLARATION

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ABSTRACT

The increase in globalisation and integration of world financial markets has seen a significant enhancement in the amount in foreign investments. This coupled with the downfall of the apartheid regime has given rise to an opportunity for companies to diversify their investment and operational portfolios internationally. Furthermore world foreign direct investment has reached a high during recent years. This indicates that companies are undertaking more opportunities to invest internationally.

This study was undertaken from the perspective of South African companies who may be considering to invest abroad. This is due to the fact that a clear research gap regarding their perspective has been found. The gap was found because most studies chose to focus on countries such as the United States of America, China and Japan, while none focused on the point of view of South African companies to the best of the available knowledge. The second factor was that studies did not only focus on the financial considerations, but instead included social and political factors. This study, due to the research gap found, chose to focus on the financial considerations of South African companies when considering making capital investments abroad.

The top 50 companies in South Africa were chosen according to the Financial Mail's Top Companies issue. It was decided that 30 of these companies would be sufficient as the research sample for the study. A questionnaire was drawn up and used as an aide memoire in personal interviews with these executives of the relevant companies. This allowed an opportunity to explore their perceptions and opinions regarding the factors that were selected as important from the literature study. In addition to this the executives provided company information that would be used in the sensitivity analysis.

It was found that there are a number of *company-* and *country-specific* factors that need be contemplated when considering capital investments abroad. The *company-specific factors* include the profitability, cash flow, liquidity, solvency and future long-term growth characteristics of the prospective investment opportunity. This should be done in comparison with the host country to ensure that it will be worthwhile to increase the company's risk factors. The *country-specific factors* include any restrictions placed on the cross-border movement of

capital, the taxation legislation, and the availability of reliable information regarding the foreign market. The availability of foreign financing, availability of foreign exchange hedging instruments, investment incentives and the availability of labour and capital in order to apply the correct operating leverages are also important. The *company-specific and country-specific* factors need be considered in *conjunction* with each other. Furthermore all factors need be compared between the *home and host countries* in order to ascertain whether the advantages of entering into the foreign market are large enough.

OPSOMMING

Die toename in globalisering en integrasie van finansiële markte in die wêreld het ‘n beduidende toename in die hoeveelheid buitelandse investerings na vore gebring. Tesame met die ondergang van apartheid het dit geleenthede aan maatskappye gebied om hul investerings en operasionele portefeuljes internasionaal te diversifeer. Verder het globale buitelandse direkte investering ‘n hoogtepunt in die onlangse jare bereik. Dit toon dat maatskappye meer geleenthede onderneem om internasionaal te investeer.

Die studie was onderneem vanuit die perspektief van Suid-Afrikaanse maatskappye wat dit moontlik oorweeg om in die buiteland te investeer. ‘n Duidelike navorsingsgaping is gevind op grond van die verskille tussen die maatskappye se perspektiewe. Die gaping het ontstaan aangesien meeste studies gefokus het op lande soos die Verenigde State van Amerika, China en Japan, met so ver bekend geen studie wat fokus vanuit Suid-Afrikaanse maatskappye se perspektief nie. Die tweede faktor was dat die studies nie slegs op finansiële inagnemings gefokus het nie, maar ook sosiale en politieke faktore ingesluit het. As gevolg van die navorsingsgaping wat gevind is, fokus hierdie studie op die finansiële oorgewings vir Suid-Afrikaanse maatskappye wanneer hulle kapitaalinvesterings in die buiteland oorweeg.

Die 50 top maatskapye in Suid-Afrika was gekies volgens die “Financial Mail” se uitgawe van vooraanstaande maatskappye. Daar is besluit dat 30 van hierdie maatskappye ‘n voldoende navorsingsteekproef vir die studie sal wees. ‘n Vraelys was saamgestel om as hulpmiddel te dien vir die persoonlike onderhoude wat met die senior bestuurders gevoer is. Dit het die geleentheid geskep om hul perspektiewe en opinies rakende die belangrike faktore wat uit die literatuurstudie geïdentifiseer is, te verken. Die uitvoerende beamptes het ook maatskappy-inligting verskaf wat in die sensitiwiteitsanalise gebruik sou word.

Daar was gevind dat ‘n aantal *maatskappy-* en *land-spesifieke* faktore bestaan waaroor besin moet word wanneer buitelandse kapitaalinvesterings oorweeg word. Die *maatskappy-spesifieke faktore* sluit in winsgewendheid, kontantvloei, likiditeit, solvabiliteit en toekomstige langtermyn groei-eienskappe van die voornemende investeringsgeleentheid. Dit moet gedoen word in vergelyking met die land waarin geïnvesteer gaan word on te verseker dat dit die moeite werd sal wees om die maatskappy se risikofaktore te verhoog. Die *land-spesifieke faktore* sluit in enige

beperkings wat geplaas word op die beweging van kapitaal oor grense, die belasting-wetgewing, en die beskikbaarheid van betroubare inligting rakende die buitelandse mark. Die beskikbaarheid van buitelandse finansiering, beskikbaarheid van verskansingsinstrumente vir buitelandse valuta, investeringsaansporingsmaatreëls en die beskikbaarheid van arbeid en kapitaal om die korrekte bedryfshefboomwerking toe te pas is ook belangrik. Die *maatskappy-spesifieke en land-spesifieke* faktore moet gesamentlik oorweeg word. Verder moet alle faktore tussen die *tuisland* en die *land waarin geïnvesteer* gaan word, vergelyk word om vas te stel of dit voordelig sal wees om die buitelandse mark te betree.

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Al- Fatiha, or the opening chapter.

1. In the name of god, Most Gracious, Most Merciful;
2. Praise be to God, The Cherisher and Sustainer of the worlds;
3. Most Gracious, Most Merciful;
4. Master of the Day of Judgement;
5. Thee do we worship, And thine aid to we seek;
6. Show us the straight way,
7. The way of those on whom

Thou hast bestowed Thy Grace,

Those whose (portion)

Is not Wrath,

And who go not astray.

Ameen

Taken from the Holy Quran, translated by Abdullah Yusuf Ali.

Prof FJ Mostert, my supervisor, for his generous amount of time, effort, guidance and attention to detail. Without his guidance and supervision this study would not have been what it is today.

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My future wife Zulaiga Isaacs I love you and may we have a long life together.

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CHAPTER 1

OVERVIEW OF STUDY

1.1 Introduction

Increased globalisation and integration of world financial markets has seen a significant increase in the amount of foreign investment and world capital flows. Foreign direct investment (FDI) can be defined as an investment made to acquire a lasting management interest and acquiring at least 10% of the equity share in an enterprise operating in a country other than the home country of the investor (Lahiri, 2009:1-2; Mwilima, 2003:31). A report published by The United Nations Conference on Trade and Development (UNCTAD) during 2008, stated that foreign direct investment during 2007 reached a record high of $1 833 billion (United Nations, 2008:4). The report added that this is a growth rate of 29.9% from the previous year, continuing a four-year period of growth. Figures like these show that FDI is still a very young and an active form of entering foreign markets, and is also widely used across the globe.

Increased financial integration in the financial world has been a significant trend in the past century. Integration has been due to a number of changes implemented by the particular country's government. Changes on the restrictions and policies of cross-border flows of capital are typical of changes implemented. The opening of a country's national borders to foreign capital and investment has become a recent trend in international business. This trend has given rise to a number of opportunities for companies with the financial capability to enter markets other than their own. Entry into foreign markets can be accomplished through a number of entry modes which suit the needs of the respective companies. Each entry mode brings its own complexities to the risk incurred in doing business in a foreign country, complexities far in excess of those experienced by a company doing business solely in its domestic market. Such risks need to be fully assessed when deciding to enter into a new country, as each country has its own merits and problems that either do or do not benefit a company.

The financial considerations of such a decision are the most important aspects of an assessment whether to enter into a foreign market or not. The aim of this study was to identify and discuss

the financial considerations applied by South African companies when making capital investments abroad. The emphasis of the study is on *capital* investments in *real assets,* compared to financial investments to obtain investment income and a possible growth in market value. The capital investments may be the result of obtaining real assets abroad, or buying a proportion of the shareholders' interest of a foreign company and acquiring proportional control over real assets. The purpose of the capital investors is therefore to be *actively involved* in the application of the real assets.

1.2 Background and importance of study

The main objective of this study was to improve the financial decision-making of South African companies when making capital investments abroad. A wrong decision to invest abroad could have a detrimental effect on a company's financial performance and long-run profitability, therefore a detailed analysis of all factors involved needs to be undertaken. Companies that decide to expand across borders will be faced with increasing amounts of complexities from various sources. This study therefore aimed to help companies fully assess the factors involved in making capital investments abroad.

The United Nations Conference on Trade and Development (UNCTAD) published the world investment report (mentioned above) which has pointed South Africa out as the main driver of foreign direct investment out of Africa. The UNCTAD report adds that South Africa leads the outward flow of funds from the African continent ahead of Egypt, Liberia, Morocco, Angola and Gabon. It was also mentioned that South African companies made their acquisitions in a number of fields including banking, information and communication technology, infrastructure development and natural resources industries. The same report added that South Africa has been ranked 37th out of 141 economies on the outward FDI index of countries. It is also evident that South Africa plays host to 10 of the 100 largest transnational corporations (TNC) from developing economies. These figures further provide evidence that South African companies have become major participants in the cross-border flow of capital. The companies listed in the report are some of the largest in the country, but it may also benefit smaller companies who are in the process of considering making capital investments abroad.

The recent increase in globalisation and financial integration is the reason why many companies have to successfully compete in markets other than their own; increased integration between

world markets now makes foreign investment possible. Numerous studies aim to measure globalisation and its effect on financial markets. A number of these studies have provided compelling evidence that the world has become increasingly integrated (Lane & Milesi-Ferretti, 2003:82-113; Nayar, 2003:4776-4782; Vo & Daly, 2007:228-250). Different authors have used different variables in their studies on globalisation, yet all of them have come to the conclusion that the world is becoming increasingly integrated. Albuquerque, Loayza and Serven (2005:268) have said that integration as a process starts with the removal of capital market restrictions; allowing foreign investors to participate, listing of domestic companies in foreign markets; and the privatisation of state-owned enterprises. Vo and Daly (2007:228) have added that many countries are trying to remove the restrictions on cross-border capital movements, deregulate financial markets and become proactive in offering competitive investment environments to encourage international investment. There are a number of other reasons for the increase in globalisation besides a change in government policies. Cerny (1994:319) has suggested that technological change is the main variable in the process of globalisation. He added that this is due to the fact that it reduces transaction cost and dramatically increases the price sensitivity of financial markets across borders, while at the same time making possible economies of scale.

A number of recent studies have focused on companies making long-term capital investments abroad. These studies have not only investigated cross-border investment, but also a number of the factors involved in this type of exchange. Some of these studies have chosen to quantify or explain the relationships between the cross-border movement of capital and a number of possible determinants. A common topic of research is the mode of foreign market entry used by companies to access these foreign markets (Ahmed, Mohamad, Tan & Johnson, 2002:805-813; Chang & Rosenzweig, 2001:747-776; Harzing, 2002:211-227; Madhok, 1997:39-61; Mudambi & Mudambi, 2002:35-55; Mutinelli & Piscitello, 1998a:491-506; Raff, Ryan & Stahler, 2009a:3-10; Slangen & Hennart, 2007:403-429; Wei, Liu & Liu, 2005:1495-1505). The modes of entry into foreign markets are not applicable for this study, but are a good indicator of some of the existing research. Other studies that have followed a similar path have focused on the performance achieved by the various forms of foreign market entry (Chen & Hu, 2002:193-210; Eicher & Kang, 2005:207-228). These studies have taken a different path to the current study, but are good examples of available literature on foreign investment. The study that is closest in nature to the present one is by Choi and Jeon (2007:1-18). These authors considered the financial

factors of making capital investments abroad, but have only focused on the exchange rate, cost of capital and the real wage rate. They have left out a number of variables that will be included here. Another important aspect to recognise is that they used econometric testing and available data instead of the opinion survey proposed for this study. Their approach is useful when testing relationships between variables; they however have not paid attention to companies who are engaged in cross-border capital flows.

The full scope of this study is the identification and discussion of the key financial variables in the decision-making process aimed at making capital investments abroad. The study reports on the perspective of South African companies, as they were the research universe. There, of course, is a great deal of literature pertaining to the determinants of investing abroad, but the focus is mainly on American, Japanese or Chinese corporations (Belderbos, 2003:235-259; Burpitt & Rondinelli, 2004:136-150; Delios & Beamish, 1999:915-933; Horst, 1972:258-266; Somlev & Hoshino, 2005:577-598; Sun, Tong & Yu, 2002:79-113; Xing, 2006:198-209). Using the largest companies within South Africa makes sense as they are the leaders and are most likely to be making investments abroad, or have existing capital invested abroad. Horst (1972:259) has said that company size is a crucial determinant of the choice to invest abroad, as investing abroad may entail fixed costs. He also added that large companies are perceived to be less of a risk than small companies. Larger companies also are associated with being better established, with a strong financial structure.

The study is expected to be beneficial as South Africa has a relatively young economy, and has only opened its borders to international financial flows over the past two decades. Previously it had been segregated from international markets as a result of the long-standing Apartheid regime. This emphasises the fact that international investment into and out of South Africa is still growing and there is room for a number of opportunities. A report by Grant Thornton (2008:3) included South Africa in its list of emerging economies. Emerging economies are normally associated with being relatively young, but experiencing figures of high growth at the same time. The importance of South Africa being mentioned as an emerging economy is that many of its business players are inexperienced in international business. The aim of identifying and discussing financial considerations in making capital investments abroad is to aid inexperienced managers in their decision-making process. It will also help to better study the factors involved

when making capital investments abroad, and hopefully provide a decision-making model. Sykianakis and Bellas (2005:954-969) have produced a study that explained the decision-making process behind foreign investments; their study, however, focused more on the psychological process behind foreign investments. They have placed no emphasis on or given any consideration to the financial considerations involved. This study aimed to investigate the financial considerations and place full emphasis on such financial considerations. No attention is paid to political or cultural considerations as they represent a study of their own.

A number of studies are closely related to the proposed study. These studies were undertaken from the perspective of the host countries and explored the factors within a host country that could attract or deter flows of foreign capital investment into the respective countries (Blomstrom, Kokko & Zejan, 2000; Fedderke & Romm, 2006:738-760; Floyd & Summan, 2008: 661-668; Green & Meyer, 1997:97-111; Horst, 1972:258-266). They have also offered a number of explanations why countries may want companies to invest within such countries and their economies. Blomstrom, Kokko and Zejan (2000:101) have indicated that countries try to attract foreign investment as it gives them the prospect of acquiring modern technology, which includes product, process and distribution technology, as well as management and marketing skills. Other studies have shown that host countries provide incentives for multinational corporations to enter their markets (Huizinga, 1991:710-716; Mwilima, 2003:29-45; Rondinelli & Burpitt, 2000:181-205). Mwilima (2003:34) has mentioned that incentives offered by governments can be grouped into three categories. The first category being fiscal incentives, includes reduced tax rates, tax holidays, subsidies, accelerated depreciation allowances and investment allowances. Category two comprises financial incentives which include grants, loans and loan guarantees. The third and final category concerns rules-based incentives. This includes modifying rules on workers' rights; modifying environmental standards, and greater protection for intellectual property rights. Rondinelli and Burpitt (2000:183) have also found that, within the State of California, property tax exemptions and pre-employment training have been used at no cost to employers to get foreign companies to locate their production plants in the state. These strategies further help to show that such factors are what companies consider when making capital investments abroad. These may not be directly from the perspective of possible investors, but help to show which factors have an impact on their decisions.

It has become clear from the extensive literature study that there is a *research gap*. This gap gives rise to the need for a study concerning the financial considerations of South African companies making capital investments abroad. It has become clear that most other studies were based on only a few *countries* such as the United States, China, Japan or Europe. Furthermore, when studies were not undertaken from a particular country's perspective, they concentrated on considerations from the host country's perspective. This study focuses on capital investments which are made *abroad* by South African companies. Many of the other studies have also chosen several variables, but have not given consideration to *financial* variables as this study aims to do. The current study focuses on financial variables only, while cultural and political considerations are ignored. The current research therefore was undertaken to fill the existing research gap found, as seen against the background of the recent increase in globalisation and financial integration, with South Africa as an emerging economy.

1.3 Objectives

The primary and secondary objectives of this research are as follows:

PRIMARY OBJECTIVE

- The primary objective of this study was embodied in an explanatory study and should improve financial decision making by South African companies concerned with the investment of capital abroad.

SECONDARY OBJECTIVES

The necessary secondary objectives to achieve the primary objective were as follows:

- To consider and discuss the tax implications that South African and foreign legislation have for a South African company making capital investments abroad.
- To evaluate the role that the interest rate, foreign exchange rate and inflation rate play in the decision to invest capital abroad.
- To take into account the capital structure, the cost of capital, operating and financial leverage considerations and the extent to which these have an influence on the decision-making process.

- To consider the financial performance of domestic companies and the financial results that can be achieved abroad, focusing on the cash flow, liquidity, solvency and profitability of companies.
- To undertake a comprehensive empirical study, which focuses on the largest companies in South Africa to obtain their perceptions concerning capital investments abroad.
- To analyse the sensitivity of the determining factors that can be viewed, for example the size of the companies, the labour and capital intensity of the enterprises, and whether the companies have experience of capital investment abroad or not.
- To provide recommendations which should be valuable to small and large enterprises when they are considering capital investments abroad, based on the perceptions of the leading companies in South Africa.

1.4 Methodology

The Financial Mail's (2008) Top Companies issue provided the ranking of the largest companies in South Africa; these top companies formed the research universe for this study. There are a number of benefits in using the largest companies in South Africa, such as:

- These businesses are most likely to make capital investments abroad, and
- Having the resource capabilities to enter foreign markets and meet the enormous costs incurred.

An empirical opinion survey was used in the empirical study. The survey was conducted through interviews with representatives of the respective companies. The top 50 companies (ranked by turnover) were contacted. If less than 30 of them were willing to participate, the companies next in line were contacted until at least 30 participants were obtained.

The questionnaire was constructed by using the secondary data collected. This questionnaire was used as an *aide memoire* to assist in directing the interview. The aim of the interview was to uncover and explore the perceptions and considerations of the company when making capital investments abroad. This was done to gain a greater understanding of the evaluation process and to determine which considerations were of further importance. The use of open-ended questions

was of assistance, as it allowed the interviewee to provide additional input or opinions that could be applicable. The methodology used to analyse the data will be discussed in Chapter 7.

1.5 Scope and limitations of the empirical study

The empirical study made use of secondary and empirical survey methods. Obtaining empirical data is always problematic as companies are not always willing to participate. A low rate of response from companies could impair the reliability and representativeness of the data. Focusing on the largest companies excludes the considerations of smaller companies as their process may differ from those used by larger companies. Examples of these differences are that they may not be able to access funding to invest in foreign markets, the cost of funds could be much higher for them, and furthermore they may find domestic workers more reluctant to join their workforce as they are creating work opportunities abroad instead of locally, which may impact on employment stability. There is also the assumption that larger companies have more resources and also are expected to exploit opportunities with greater ease.

1.6 Overview of study

The chapters of the study are as follows:

Chapter 2: Aspects and implications of taxation

Taxation in the domestic and foreign market is one of the most important factors to consider when doing business abroad. A number of studies have been conducted to assess the extent to which taxation plays a role in foreign capital investment. The variables used and the results of these studies differ greatly from each other. In addition to variation in previous studies, many of them have received mixed results. The main concern of a company with foreign investments is that of being taxed both in the domestic and in the foreign market. Several authors seem to agree that higher tax rates can be associated with lower rates of foreign investment as this lowers the returns on foreign investments made (Desai, Foley & Hines, 2004:2742; Fedderke & Romm, 2006:748; Vo & Daly, 2007:245; Weichenrieder, 1996:451). Servaes and Zenner (1994:42-56) also found that changes in tax legislation have brought about changes in levels of direct investment. There is also a number of studies, such as by Rondinelli and Burpitt (2000:181-205), that has explored the relationship between a foreign country's tax incentives and tax deductions

to induce inward direct investment. It is evident that taxation of South African and domestic countries needs to be explored further to assess the full impact it has on foreign investment.

Chapter 3: Inflation rate, interest rate and foreign exchange rate considerations

The inflation rate, interest rate and the foreign exchange rate are three important determinants of the climate of doing business in a foreign country. They are all very interrelated aspects, yet each of them has their own effect on the conditions of doing business abroad. Kyereboah-Coleman and Agyire-Tettey (2008:57) have found that foreign exchange rate volatility plays a big role in foreign direct investment as it may have a negative impact on the inflow of foreign direct investment to countries. Kogut and Chang (1996:221-231) have expressed a similar view and have also found that real exchange rates affect the timing of investments. The relevant foreign exchange rate relationships differ greatly between domestic and foreign markets; so much that it could possibly change the financial performance of a respective project. Choi and Jeon (2007:2) added that foreign exchange rate risk affects international investors directly, because of change in relative asset prices and cost of capital at a given time.

Inflation is a worldwide factor that confronts many companies; the effects, however, differ from country to country. This is shown clearly by the current financial crisis in Zimbabwe where exorbitant inflation figures have been reached. Inflation in Zimbabwe and South Africa are worlds apart, South Africa being well below Zimbabwe's. Vo and Daly (2007:244) have found that countries with lower rates of inflation are more likely to receive capital investment from abroad.

The interest rates available in the foreign and in the domestic country are also of immense importance to a company making capital investments abroad. It plays a large role in doing business as it has an impact on the cost of debt capital in the foreign market and can be directly compared to the interest rate in the domestic market.

The discussion and assessment of these three variables are important to the process of considering the financial implications of investing abroad. These three have a close relationship with each other, as all are needed to calculate the financial performance of capital investments. They also are interrelated, as changes in one of the variables may bring about a change in the others.

Chapter 4: Capital structure and the cost of capital

The operating leverage of a company is an important consideration in the decision to invest abroad. Some industries are more capital intensive, while others are more labour intensive. The differences in this could greatly affect the cost structure of the company and, at the same time, change operating factors. If the industry is labour intensive, the company needs to research the availability of unskilled and skilled labour, and also consider the relative cost of labour. In contrast to that, capital intensive industries make companies consider the cost of funding available in the foreign market.

The cost of available funding will also interlink with the level of financial leverage and cost of capital. The degree of financial leverage is determined by the mixture of various forms of capital used by companies. Companies will also have to decide whether they will obtain financing in the foreign or domestic market. It is obvious that if the cost of debt financing is cheaper in foreign countries, companies will use a higher amount of debt financing, which will change the composition of financial leverage and, ultimately, the cost of capital. Careful consideration of these factors is imperative as they can provide the company with a number of advantages. Examples of the advantages are that debt is a tax-deductible expense in many countries and therefore can lower the overall cost of capital. Equity financing, on the other hand, could prove to be costly and can inflate the overall cost of capital. A company should also research the expected returns to equity stakes within the company and compare that with expectations in the home market. The costs of the various forms of financing also differ from country to country, so companies should explore all possibilities to get the overall cost of capital to a minimum level.

Chapter 5: Cash flow, liquidity, solvency and profitability

Liquidity, solvency, profitability and cash flow of companies are important factors in the process of the financial analysis of any company. It provides vital information that can determine important decisions about a potential company or the industry to be entered. The norms concerning these ratios differ from country to country and they differ especially between industries. The liquidity ratio measures the ability to meet short-term liabilities and obligations. The solvency ratios are quite similar to the liquidity ratios, but they measure the ability of a company to meet its long-term obligations. Estimation of these ratios is an important

consideration when making capital investments abroad, as they are important to an analysis of any enterprise. Investment in a company that does not meet the required liquidity and solvency ratios could have detrimental results.

Profitability is probably the most important ratio, as profit is the main motive for a company's expansion. The periodic cash flow available from foreign capital investments is of importance in the decision to invest abroad, as investors want to recoup their original capital investment and require a proper cash flow return on their venture.

Chapter 6: Sensitivity analysis

The sensitivity analysis of the determining factors, amongst others, applied the following classification bases:

- The size of the various enterprises in terms of the total assets and total number of employees
- The labour and capital intensity of the companies
- The company's level of experience concerning capital investments abroad

Chapter 7:Research methodology

This chapter will provide an in-depth discussion regarding the methods to be used to obtain the primary research. This discussion will involve the population, research sample, research design, research process, data collection and limitations of the research.

Chapter 8: Empirical study

The research universe selected for this study comprised the largest companies in South Africa as ranked by The Financial Mail's (2008) Top Companies issue. There are a number of benefits in using the largest companies in South Africa instead of randomly selected companies. Firstly they are more likely to make capital investments abroad. Large companies may also have the resource capabilities to enter foreign markets, as the costs incurred can be enormous.

The empirical study made use of an empirical opinion survey. The survey included an interview with representatives from the respective companies. The top 50 companies (ranked by turnover)

were contacted. If fewer than 30 of them were willing to participate, the companies next in line were contacted until at least 30 participants were obtained.

The secondary data was used to construct a questionnaire and the questionnaire was used as an *aide memoire* to direct the interview. The interview aimed to uncover and explore the perceptions and considerations of the company when making decisions to make capital investments abroad. This enabled the researcher to fully understand which considerations are of more importance in the evaluation process. The questions were open-ended questions, allowing the interviewee to give any additional input or opinions that could be useful.

The relative importance of the various determining factors were evaluated by using a Likert scale, while the positive and negative experiences of companies which have *already* made capital investments abroad are highlighted. The considerations of companies which were *only* assessing the option to invest capital abroad also received the necessary attention. The literature review and the preliminary empirical study highlighted the relevant aspects which were addressed by the questionnaire used by this research.

Chapter 9: Results of the sensitivity analysis

A sensitivity analysis, as introduced in the above discussion of Chapter 7 will be employed so that the sensitivities of the various determining factors may be viewed. This chapter will present followed by a discussion of the results obtained in the sensitivity analysis. This should provide additional input regarding the factors that the study is aimed at exploring.

Chapter 10: Main findings, conclusions and recommendations

This chapter reports the main findings and conclusions of the study, taking the secondary and primary data into account. The conclusions lead to recommendations for improving financial decision making regarding capital investments abroad.

1.7 Conclusions

The aim of this study was to aid the decision making of South African companies when contemplating capital investments abroad. It is evident that a study of this nature is able to achieve the stated objectives and can be extremely useful to companies. The background information on previous studies in the same field clearly showed a research gap concerning this

topic. Studies concentrated on countries like Japan, the United States or China have provided little insight into South Africa. In addition few authors have chosen to focus on the financial considerations involved in making foreign capital investments. The studies that delved into financial considerations only explored relationships between a handful of possible considerations which companies investing abroad may encounter. Furthermore, they have mostly performed econometric analysis on data obtained from public sources. Very few studies have chosen to utilise an empirical opinion survey to obtain insight from actual companies involved in foreign capital investments, but such an approach can be more beneficial than simply studying the relationships between selected variables. The use of an empirical survey should also be beneficial to other companies in the process of making or considering making capital investments abroad. The insights from the study may also provide benefits on country level as the countries will be aware of which conditions are favoured by companies for making foreign investments. Foreign direct investment is very beneficial for countries as it provides additional capital to stimulate and support their economies.

Overall the study should provide valuable information to companies interested in expanding their horizons into foreign markets. It should also make them aware of financial considerations that may be overlooked. The extensive literature and empirical study highlight the financial aspects considered by companies when making capital investments abroad, which could lead to achieving the primary objective of this study.

CHAPTER 2

ASPECTS AND IMPLICATIONS OF TAXATION

2.1 Introduction

Taxation is one of the most important aspects that any business may encounter irrespective of the country within which it operates. It has the ability to greatly change the results and earnings of a company. There may be ways to alter the tax liability, avoid the liability or reduce it, but the fact remains that it is a worldwide occurrence that plays an important role in running a business. Nearly all companies which are in operation will be influenced by taxation in some way or another. Taxation complicates the matter of doing business and has a number of effects on the profit of a business.

Companies that conduct operations in countries other than the home country deal with an increasing amount of complexity concerning its tax situation when it incurs tax in the foreign and domestic country. This makes it obvious that taxation is an important aspect to consider when making capital investments abroad. Companies that have operations or are considering such investments abroad will be liable for tax in the foreign country and not only for tax in the domestic market. Olivier and Honniball (2008:1) have stated that international tax is a misnomer as international tax laws do not exist. They explain that international tax refers to the international aspects of domestic laws. From the perspective of a South African tax adviser, international tax mainly involves an understanding of the interaction of the South African tax system with that of a foreign country. The factor that makes international taxation increasingly complicated compared to being taxed only in the domestic market, is that of double taxation. Double taxation results when two or more countries tax the same entity or the same income (Sandler, 1998:15). Sandler added that the term “juridical double taxation” is generally defined as the imposition of comparable taxes in two (or more) countries on the same taxpayer in respect of the same subject matter and for identical periods. A number of measures and treaties have been put into practice to avoid double taxation; they will, however, be discussed later.

Companies that have foreign operations or subsidiaries in foreign markets are called controlled foreign companies for the purposes of South African income tax law. Controlled foreign companies are defined by Stiglingh, Koekemoer, Van Schalkwyk, Wilcocks, De Swardt and Jordaan (2008:517) as a foreign company in which South African residents, individually or jointly, directly or indirectly, hold more than 50% of the participation rights or of the voting rights. There are a number of laws and rules that fall under the spectrum of controlled foreign company (CFC) legislation. The scope of this study is not to provide a full discussion of the laws and the relevant acts, however, but rather to discuss the impact it will have on the process of making capital investments abroad. Some of the laws do have a greater impact than others and so will need further discussion. CFC legislation was introduced into the South African Income Tax system during 1997 to prevent the avoidance of taxation on investment income through the use of a foreign company or trust (Olivier & Honiball 2008:430). The legislation includes not only investment income, but all income earned including capital gains that have accrued to the South African resident. It is also important to note that South Africa uses a residence-based, as well as a worldwide system of taxation (Stiglingh *et al*., 2008:49). This means that companies are taxed on income from all sources regardless of which country they are based in. This basis of taxation is similar to that used by the United States. Guenther (1996:148) has provided more insight, saying that any corporation created or organised in the United States or under its law, is considered to be a domestic corporation and is subject to being taxed on the full amount of its worldwide taxable income, regardless of where the income is earned. Danzinger (1991:10) says that there are two principles for taxation used by countries. The first is the residence taxation used by South Africa and the United States, which means all sources of income that the resident receives regardless of origin will be taxed in the domestic market. The other is the source principle, which is also referred to as the "territoriality-principle". The application of the source principle implies that the levying of tax is limited to income from sources within the taxing state or country, irrespective of the personal attachment of the taxpayer to a particular country (Danzinger, 1991:10).

Taxation affects a company in a number of ways which may not all be obvious. The biggest effect of taxation on a company is that it reduces the profit or return of a company on its investment (Vo & Daly, 2007:244; Weichenrieder, 1996:451). Taxation also has a large effect on the company cost of capital and capital structure. This is due to the fact that interest is tax

deductible under the legislation of most countries. Taxation also affects the profit of a company through the tax deductibility of depreciation which lowers its taxable income. It is obvious that tax plays a large role in the running of a company; in many instances it is seen to have more negative than positive effects. Many companies or executives of the companies explore ways to reduce or eliminate the tax liability of a company. This can be done through a number of ways, some of which are legal, some of which bend the rules and some that are completely against the rules. Tax avoidance is classified by Stiglingh *et al*. (2009:657) as a situation in which a taxpayer has arranged his affairs in a perfectly legal manner, with the result that he has either reduced his taxable income or has no income on which he is taxable. Tax evasion, on the other hand, refers to illegal activities deliberately undertaken by a taxpayer to free himself from a tax burden. Tax is a serious issue not only for the running of a business, but, even more important, for a company considering undertaking new business, such as making capital investments abroad. If not researched and considered fully and correctly, it can have a detrimental effect on the company.

There are a number of studies that have investigated taxation and the effect it has on attracting or deterring foreign investment in a country. There seems to be a consensus that tax rates and foreign direct investment have a clear negative relationship (Benassy-Quere, Fontagne & Lahreche-Revil, 2005:598; Cassou, 1997:1298; Desai, Foley & Hines, 2004:2742). Other studies go further than just saying that they have a negative relationship; they explore the relationship and the chosen location of FDI. These studies have found that tax considerations can influence the location of FDI (Azemar & Delios, 2008:103; Devereux & Griffith, 1998:393; Grubert & Mutti, 2000:836). The results are in line with what would be expected, as higher taxes diminish returns that could be achieved. Hartman (1984: 484) found that when taxes were lowered in the United States, it provided a strong encouragement to increase FDI in that country. There are vast differences between the findings of various studies; these differences could be attributed to the differences in models used or the methodology of the study. There are a number of other methods used by governments to attract FDI to their countries. These are commonly called tax incentives and will be discussed in a following section.

2.2 Double taxation

Double taxation has been mentioned in the text, but needs an in-depth explanation as it is the source of most of the difficulties arising from taxation on doing business in a foreign market.

International double taxation occurs where comparable taxes are levied by two or more countries on the same taxpayer for the same subject matter and for the same tax periods (Danzinger, 1991:317). Double taxation can be extremely harmful to a company as it means that companies are taxed more than once on the same profit. This will obviously leave very little profit and incentive for a company to carry on business. It has, however, been recognised that double tax is harmful and there are a number of measures that are in place to prevent this from occurring.

According to Stiglingh *et al*. (2008:512), there are two types of double tax relief systems that exist between countries. The first type of relief is unilateral relief. This occurs when one country grants tax credit relief for taxation already paid on income that a company earned in another country. The second type of relief between countries is the double taxation agreement. This occurs where two countries enter into a double taxation agreement to provide tax relief to the company. There are also two types of double-taxation agreements which are used. These agreements involve a comprehensive agreement which covers a number of different incomes, and restricted agreements that cover a special type of income. Olivier and Honiball (2008:320) refer to the tax credit method as a rebate. They added that the credit is only available to residents and cannot be claimed by non-residents who are taxed on a source basis. The reason for referring to it as a rebate, is that it is deducted from the taxable income that has been calculated. A tax credit, on the other hand, is deductible from the tax liability of the company. Olivier and Honiball (2008:327) added that there are two other forms of relief from double taxation besides the credit method and double tax agreements that countries can grant. They are the exemption method, which is used in some instances in South African law, and the deduction method, which is not used in South African tax law.

A study by Janeba (1995:322) has found that double taxation treaties can be understood as a form of cooperation between governments. Picciotto (1992:12) indicated that the United States also makes use of a credit system of double tax relief. He also added that the foreign tax credit system was introduced following complaints by American companies with foreign branches that high US taxes disadvantaged them in relation to local competitors. Stiglingh *et al*. (2008:511) have included the description of an example of a double tax agreement between South Africa and Australia in their book. They added, however, that the agreement was not yet in place at the time of printing as it was not yet approved and published. However, as at 1 August 2007, South Africa

had entered into 75 double tax treaties. The first of these was between South Africa and Zambia and was entered into during August 1956 (Olivier & Honiball, 2008:25). The treaty between South Africa and Australia may not seem applicable since it has not yet been published, but it is a good example of the conditions under which double tax agreements are undertaken. The treaty involved cover a number of taxes, including normal taxation and Secondary Tax on Companies (STC), as well as income and resource tax imposed by the federal law of Australia. The agreement was entered into for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income. The agreement includes a Section 25 that facilitates the exchange of information between the competent authorities of the two countries that is necessary for carrying out the provisions of the agreement or of the domestic law of the two countries concerning taxes to which the agreement applies. It is also important to know that both countries use the residence method for their tax systems.

2.3 Model tax conventions

The double taxation on income and capital has become a large problem to many companies doing business in more than one country. It has become such a problem that a great deal of time and effort has been put into preventing it from happening. A number of measures from countries and international organisations have been enacted to prevent double taxation from occurring. Danzinger (1991:330) identified two well-known measures put in place by international organisations which are of significance for South Africa. The first is the 1977 Model Tax Convention on Income and on Capital of the Organisation for Economic Co-operation and Development (OECD), and the other the 1980 Model Double Taxation Convention between Developed and Developing Countries of the United Nations. The two conventions are identical to each other to a large extent (Sandler, 1998:86). There are, of course, a number of differences between the two, due mostly to the fact that the UN Model gave more weight to the source principle than the OECD Model did.

The OECD Model Tax Convention is the most common and well known of the two conventions. The OECD (2008:7) said that the aim of the Model Tax Convention is to provide a means of settling most common problems that arise in the field of international juridical double taxation on a uniform basis. The Council of the OECD recommended that their member countries conform to the Model Tax Convention when concluding or revising bilateral conventions. According to

Olivier and Honiball (2008:8), the first draft of the double taxation convention was tabled in 1963. The model was revised and the Model Double Taxation Convention on Income and on Capital was published in 1977. It has since been revised as taxation is not seen as static and the convention has to keep up with changing laws. The Model Tax Convention has wide influence on the negotiation, application and interpretation of tax conventions (OECD, 2008:9). The convention can be beneficial to countries that do participate, as double taxation is something all companies have to address. South Africa is not a member of the OECD, but has been given so-called "observer" status by the OECD (Olivier & Honiball, 2008:8).

The United Nations Model Double Taxation Convention between Developed and Developing Countries is not as widely used as the OECD Convention. The two conventions are similar in a number of ways; they both follow the same format and have provisions and articles that are nearly identical. The UN created the convention for a number of reasons. The UN convention (2001:vi) stated that the objectives of bilateral taxation conventions are to protect the taxpayers from double taxation and to prevent the discouragement which taxation may provide to the free flow of international trade and investment and the transfer of technology. This is nearly identical to the aims and objectives of the OECD Model Tax Convention. The UN convention went further and said that they want to provide a reasonable element of fiscal and legal certainty as a framework within which international operations can be carried on.

Both conventions discussed and provided guidelines as to the way matters of taxation should be handled. Both conventions have a detailed list of articles that cover all types of income that are listed and commented on over 15 sections, with one section devoted to the taxation of capital gains. The conventions provided definitions of the applicable terms, methods for elimination of double taxation, as well as special and final provisions. The model tax conventions have not been discussed in any detail as that is not the aim of this research. A mere introduction to the Model Tax Conventions is necessary, however, as it is a key element in the taxation of a multinational enterprise. Without conventions such as those published by the UN and OECD, businesses would still be liable for tax in more than one country and thereby lose large amounts of cash to this. Other treaties have also been entered into by South Africa, but they are numerous and, once again, are beyond the scope of this study. The Model Tax Conventions need to be brought to the attention of companies that consider expanding into other markets, as whether the chosen

country follows some of these agreements needs to be researched fully, as it can affect the company to a considerable extent.

2.4 Tax incentives

Tax incentives are an important aspect of the evaluation process for deciding whether to enter into a foreign market or not. This is due to the fact that many nations are now offering tax or investment incentives to attract foreign direct investment into the country. Spitz (2007:49) defined tax incentives as tax concessions that are granted to attract local or foreign investments to particular activities or areas. These have been widely put to use by a number of nations, not only across countries, but within countries competing for FDI for different regions. Such concessions are used to boost and maintain economic growth through attracting FDI to a country (Yu, Chang & Fan, 2007:263). Tax incentives and their use are a widely researched topic as it plays a considerable role in the context of international and local direct investment. A study by Rondinelli and Burpitt (2000:182) mentioned that advocates of incentives argue that they are investments rather than giveaways since they not only encourage increased economic activity, but create new jobs and ultimately increase tax revenues within the country. Other studies, such as the study by Deprez (2003:376), argued that providing lower tax rates and other tax incentives result in lower tax revenue, so that the state becomes less capable of supporting social welfare programmes. Beyer (2002:208) has also found that tax incentives appear to be of little value. It is also evident from his analysis that there is no significant relationship between the introduction of incentives and the level of FDI. Tung and Cho (2002:127) have studied the effects of tax incentives on FDI in China. They, on the other hand, have found that tax incentives were effective in increasing FDI beyond the influence of other factors. They also found that FDI increased faster in regions with tax incentives than in those without. Studies therefore put forward different points of view and present different results on the effectiveness of tax incentives in inducing FDI. The analyses, however, are not the same for all countries and also differ with regard to the specification of the model used. Their results should not be taken as a final conclusion; they should be assessed and considered in light of the situation and with complete information on the conditions under which the incentives were introduced. Companies that are considering capital investment need to take the various forms of tax incentives into account when doing their evaluation. They need to weigh the possible benefits of the tax incentives against other incomes and benefits of entering into the foreign market.

Spitz (2007:49) mentioned the four categories of tax incentives which are discussed in the following sections, namely tax exemptions or holidays; deductions from the taxable base; reduction in the rate of tax; and tax deferral. These have all been used by various countries. The effects or benefits differ with respect to the circumstances or conditions under which they were granted. A study by Lin (2002:81) indicated that since 1979, China has formulated a number of tax incentives by drafting a tax law concerning foreign business in accordance with the principle of minimum tax burden and maximum preferential tax treatment, in the spirit of opening its borders to the outside world. The study showed that China has used most of the tax incentives available in its policy formulation, including tax rate reductions, tax holidays, reinvestment allowances, depreciation allowances, withholding of taxes and allowing losses to be carried backwards and forwards. The study also mentioned that China's incentive campaign was successful, but has come at a great cost.

The various categories that are available to countries have different effects and therefore produce different outcomes for each incentive given. Some come at a greater cost to the country while others are less costly; some are favoured by investors while others are less favoured. Tax incentives need to be considered and weighed carefully, as some are more beneficial than others. A good example of this comes from the study by Yu, Chang and Fan (2007:267). They examined the timing and effectiveness of the tax rate reduction against an entry cost subsidy. They found that the entry cost subsidy costs less than the tax rate reduction, and that the entry cost subsidy will spur an earlier arrival of FDI than the tax rate reduction. A large number of comparisons could be made amongst the various tax incentives; they are not necessary, however, and will require a large amount of time and space within this study. The above point is sufficient to illustrate the differences in the results of various tax incentives that are offered.

2.4.1. Tax exemptions

Tax exemptions comprise one of the classes of tax incentives used by various countries to induce FDI. Spitz (2007:49) regarded tax exemptions as the most important incentive and stated that it is usually allowed subject to a number of conditions. The conditions under which tax exemptions are granted can vary greatly in respect of the region, industry, period and performance requirements. The conditions can be used to attract FDI into the various industries and areas and can be facilitated by gearing the conditions more in favour of the specific region or industry. A

good example of this is the tax exemptions used by China in its large arsenal of investment incentives to attract FDI into its country. They have allowed a 100% exemption for the first two profit-making years and a 50% tax rate reduction for the following three years for production-orientated foreign investment enterprises (Lin, 2002:82). They also used a number of other exemptions; these are aimed at enterprises using advanced technology, production-oriented enterprises, financial institutions, equity joint ventures and, lastly, the engagement of foreign investment enterprises involved in agriculture, forestry or animal husbandry. These exemptions are examples of those mentioned that are aimed at furthering advancement in various industries. Tax exemptions may seem to suggest that governments are losing large amounts of revenue, but it is recovered from the stimulation in the business environment brought about by the increase in FDI. Rondinelli and Burpitt (2000:183) have found, however, that the costs of incentives outweigh the benefits, and that many parties overestimate the importance of incentives with regard to affecting business location decisions. Beyer (2002:203) has found support for arguments against the tax holiday. They have found that investors see tax holidays as of little importance as far as their influence on taxation is concerned in the short term.

2.4.2. Deduction from the taxable base

A deduction from the taxable base is granted with respect to expenditure and losses that would not normally be deductible under the normal tax system and principles (Spitz, 2007:49). There are a number of ways by which countries can reduce the taxable base of a company. The most common form of deduction is through depreciation and this is allowed in the form of an initial allowance which is a type of accelerated depreciation, and an investment allowance which is an additional deduction over and above the initial investment amount. The most common use of depreciation is the annual depreciation allowance, while accelerated depreciation for a particular year or number of years has frequently been used as an investment incentive. Depreciation concerns the amount of the deduction allowed for the writing-off of the cost of an asset over a number of years and reduces the tax value of the asset as it ages (Brazell & Mackie, 2000:532). The South African Revenue Service (SARS) allows taxpayers a deduction against taxable income for the amount by which the value of qualifying assets used by them for the purpose of trade has been diminished by reason of wear and tear (depreciation) (Stiglingh *et al*., 2008:170). Depreciation is a tax deductible expense, meaning that it is deducted from the amount of income received for the year, thus it lowers the taxable income (if available) and, ultimately, the cash

outflow of the tax liability. This method does have its limitations as an incentive, though. It has been shown that inflation is harmful or reduces the real benefits that are offered by depreciation allowances. Kopcke (1981:124) has shown that rising inflation reduces the present value of real depreciation allowances for a variety of capital goods. The value of depreciation allowances also is lower for longer-lived capital assets. It is shown that the real value of depreciation allowances drops at a faster rate for more durable capital assets. The inflation rate can corrode the incentives offered by a country's government.

2.4.3. Reduction in the rate of taxation

A reduction in the rate of taxation is one of the most commonly used tax incentives by countries. Spitz (2007:51) defined a reduction in the tax rate as a tax on certain types of entities or particular activities at a lower rate than is normally applicable. He also added that this is sometimes done in the form of a refund of a certain percentage of taxes paid. The tax rate reduction may also, at times, be offered as an incentive for a certain period of time only. This is a good incentive to be used in the promotion of certain industries and sectors. China has previously employed this technique as one of their tax incentives. They first offered a 33% tax rate for all foreign investment enterprises and then added a number of reductions of the tax rate to companies in specific industries. They offered a 15% tax rate for foreign investment enterprises and foreign enterprises in special economic zones; production-oriented foreign investment enterprises in economic technological development zones; companies engaged in long-term projects; foreign investment enterprises engaged in production or infrastructure projects in Shanghai Pudong New Area, and equity joint ventures engaged in port and dock construction anywhere in China (Lin, 2002:82). They have also offered a 24% tax rate for all production–oriented foreign investment enterprises in coastal open economic zones. This once again, is a good example of the ways in which tax rate reductions are used to stimulate certain industries or areas. Tung and Cho (2000:119) studied the effects of China's reduced tax rate offerings to create special economic zones. They found that these incentives were more effective in increasing FDI than any other factor, and it also increased FDI faster than in regions without incentives. However, Yu, Chang and Fan (2007:267) found that, when the tax rate reduction is studied in comparison with a cash subsidy, the subsidy is the better option. The subsidy was rated the better option as it may cost less and, at the same time, may spur earlier arrival of FDI. From the perspective of the company, the tax rate reduction may seem an extremely favourable

incentive to use to attract FDI. Once again, this has to be considered in light of full information from the perspective of the investor. This is due to the fact that the company may not be as profitable in the first few years or months of establishment. In this case, the tax rate may not be as beneficial as some of the other incentives offered, for example a cash subsidy.

The investment tax credit was introduced to the US in 1962 and eliminated in 1986. It was introduced by the federal government, in the hope that it would raise the level of investment in equipment. There were three ways in which it was intended to work, where two were microeconomic and the other macroeconomic. The macroeconomic approach stated that any tax cut would stimulate the economy by increasing aggregate demand. The first microeconomic way concerned the income effect. A company that receives a tax credit reduces its tax liability and, as such, increases the income available to spend. The second way concerned the price effect. This is simple, as it states that a company or individual will buy more of anything if it is cheaper (Karrier, 1998:95). Chirinko and Wilson (2008:2381) have stated that the tax credits were introduced at the state and national level of taxes. Davis and Swenson (1993:509) (in their study) showed that the level of capital investment was not affected by the introduction of a tax credit. They stated further that their result contradicted neoclassical theory and the expectations of the policy makers.

2.4.4. Tax deferral

Tax deferral refers to a situation where payment of taxes is deferred to a later stage. This incentive seems to be less commonly used as most of the literature consulted discuss and make use of most of the other incentives. Tax deferral is not as effective as other incentives as it does not decrease the tax liability; it merely allows the tax to be paid in a future years. This is expected to be far less beneficial to a company than the other incentives that are commonly offered. Tax deferrals are usually administered in the same manner as the other incentives that are offered. They are offered to certain industries in certain locations to promote those specific industries and locations. They have a definite time period as they can only be deferred for a certain amount of time before they have to be paid. Tax deferrals may, however, be useful in some instances and to certain companies. Companies that are engaged in high amounts of research and development in the earlier years of the company may incur higher expenses and as such have a lower taxable income and profit in earlier years. In such situations, deferring taxes

from a period of low profit to a time when the company shows higher profits may be extremely beneficial, as companies thereby are allowed to keep more of their disposable income when needed. Tax deferrals may not be as widely used and researched as other forms of tax incentives, however are preferred by and seem to benefit some companies more than others in certain instances.

The following table contains a summary of the tax incentives offered.

Table 2.1 Tax incentives offered

Category of incentive	Definition	Examples	Evidence
Tax exemptions	Companies exempt from paying taxes for a certain period or in certain instances	Tax free status for a certain number of years	Sources rate it as ineffective
Deduction from the taxable base	Deduction of expenses and income of a company	Accelerated depreciation, initial and investment allowance	Inflation has negative effects
Deduction in the rate of taxation	A lower rate of taxation is used for companies eligible for it	15% rate instead of 30%	Most effective incentive that is used
Tax deferral	Payment of taxes are still normal, but deferred to a later stage	Payment of taxes are deferred to a later stage	

2.5. International tax havens

International tax havens provide an important consideration for any company considering making capital investments abroad as they present a number of potential benefits. Many of the studies consulted, use the OECD definition of a tax haven. Sandler (1998:5) has defined a tax haven as a jurisdiction actively making itself available for the avoidance of tax which would otherwise be paid in countries that charge relatively high taxes. Olivier and Honiball (2008:552) also called on an OECD source and quote this as saying that a tax haven can be described as a country which is able to finance its public services with no or nominal income taxes and which actively makes itself available to non-residents for the avoidance of tax which would be paid at a relatively high tax rate.

Honiball and Olivier (2008:553) made use of the OECD report for their classifications of tax havens. They listed four factors that help classify tax havens, which are that they claim no or

nominal tax on income; they show a lack of effective exchange of information about taxpayers benefitting from the low tax regime; as well as a lack of transparency in the operation of the legislation, legal or administrative provisions; and reveal the absence of a requirement that a qualifying activity needs to be substantiated. Ginsberg (1997:5) added that he prefers to refer to tax havens as "offshore finance centres" as it is a broader concept and covers three classes of tax haven jurisdictions. The three classes involve firstly, countries where there are no relevant taxes; secondly countries where taxes are levied only on internal taxable events, but not at all or at very low rates on profits from foreign sources; and, finally, countries which grant special tax privileges to certain types of companies or operations.

Tax havens have become an important part of the financial plan of a multinational company. There are a number of reasons for the growth in importance of a tax haven in modern business. Ginsberg (1997:10) had a long list of common reasons or motivations why companies make use of tax havens. The list of reasons includes that taxes are high in the country of residence, especially where a progressive income tax system is used; anonymity and secrecy regarding bank accounts; and political considerations. There are a few other reasons for the use of tax havens which include the re-routing of export sales; depositing of surplus funds; accumulating income prior to emigration; geographical expansion for multinational corporations; and, for the use of people intending to divorce or to protect their assets from greedy ex-spouses.

A large number of tax havens are available for use by companies. There are pure tax havens that fit the definition provided above, but there are other tax havens that do not fully meet the definition of tax havens, but have the benefits that are offered by pure tax havens. The list of tax havens includes, for example, the Bahamas, Bermuda, The Cayman Islands, Cyprus, Gibraltar, Liechtenstein, Panama and Switzerland (Grundy, 1983:1). Desai, Foley and Hines (2006:514) said that multinationals employ tax haven affiliates to reallocate taxable income from high-tax to low-tax jurisdictions and intra-company trade of assets. They also added that American companies with low foreign tax rates benefit from using tax havens to defer, or otherwise avoid US taxation of their foreign incomes. Ginsberg (1997:20) described an example in which a tax haven is used to extract profits from one country to another. Firstly an exporting company located in a "high-tax country" sells its products at a relatively low profit margin to a subsidiary operating in a tax haven. The subsidiary then resells the products at a higher price and thus

"traps" profits which are tax free in the tax haven. Olivier and Honiball (2008:554) supplied their own reasons why companies and individuals utilise tax havens. Firstly, there is the use of intermediary holding companies; and tax havens are an important tool for tax planning and are usually used in combination with another low-tax jurisdiction. This is in agreement with Picciotto (1992:135), who has said that a single tax haven is unlikely to possess all the desirable attributes for an intermediary company, therefore a number of different tax havens and intermediary companies are used. Secondly, tax havens allow for flexible or different corporate entity forms which may be different from those offered in a home country. There is also the matter of tax haven trusts which allow companies or individuals to establish an institution that is separate to that of the individual or company. The last reason that needs be mentioned as applicable to this study is the centralising of intellectual property ownership for asset protection purposes, which is common in respect of copyrights and patents.

Tax havens have been established to offer a number of benefits to the individual or company that considers using it, but a number of movements oppose tax havens and the use of it to avoid tax. Picciotto (1992:142) stated that, as there is increasing use of tax havens and intermediary companies, tax authorities have activated general anti-avoidance provisions, and also enact more provisions aimed at international tax havens. The concern is that tax havens attract business and tax revenue away from countries that are not tax havens. This is an expected side effect of the use of tax havens, as the aim of using tax havens is either tax avoidance or tax reduction. Desai, Foley and Hines (2006:223) have undertaken a study to see whether tax havens distort economic activity or not. They have found that tax havens do not distort economic activity from non-tax havens. They have also found that companies that establish operations in tax havens, also establish operations in nearby high-tax countries. Tax havens comprise an extremely important and beneficial part of the process of considering where to locate foreign operations as they do have a number of benefits and implications for the multinational corporation. The various tax havens need to be assessed and evaluated to decide which one will benefit the company the most.

2.6 Profit sharing

Profit shifting or the repatriation of profits by a company is another important factor that needs to be considered by a company while choosing to make capital investments abroad. Shifting profit is as important as generating profit itself. This is due to the fact that high profits are of little importance to the host country if it can be moved to the home country. It is also less important to a company if the return is not maximised by minimising the tax liability incurred in the moving of the profits.

The use of various tax loopholes and technicalities for the movement of profit between subsidiaries is a common method of tax reduction or avoidance. Danzinger (1991:303) mentioned two common methods of profit shifting that are used, which are discussed in the following sections. The first and most common form of profit shifting is called transfer-pricing. This is defined as the export of profits to foreign countries through artificial inter-company pricing arrangements, or through excessive interest, royalties, or management charges, or the trading of goods with overseas affiliates below or in excess of their value. Killian (2006:1072) has added that companies within the same group are not subject to identical tax rules. This often gives rise to the opportunity to reduce the overall tax liability of a group of companies by using inter-group charges. It is for this reason that tax authorities carefully monitor the prices used in inter-group transfers. The second form of profit shifting is called thin capitalisation, which is the capitalisation of a subsidiary by its foreign holding company by means of debt. The interest on the debt is deductible by the subsidiary, compared to equity, of which the dividends paid are not deductible by the subsidiary.

2.6.1. Transfer pricing

Transfer pricing is defined above as a method that many companies with foreign affiliates or subsidiaries use to avoid or reduce their tax liability. A number of rules or principles have been established to set a standard for the practice of transfer pricing. The basic principle that governs most transfer-pricing rules, is that transfer prices should meet the arm's length standard which means that the prices are consistent with prices unrelated parties would use for similar transactions (Deprez, 2003:379). The arm's length principle has been firmly ground by the OECD in a paper entitled Transfer-Pricing Guidelines for Multinational Enterprises and Tax Administrations. The OECD has been the guiding forum in transfer pricing, especially since its

1979 report on Transfer Pricing and Multinational Enterprises (Allan, 2007:17). The report has been changed a number of times over the years, however, to amend it due to current developments.

In article 9 of the OECD Model Tax Convention on Capital and on Taxation in 2008 it is stated that a state may, for the purpose of calculating tax liabilities of associated enterprises, may re-write the accounts of the enterprise if, as a result of the special relations between the enterprises, the accounts do not show the true taxable profits arising from the financial statements. Re-writing of accounts of associated enterprises is not authorised, however, if the transactions between such enterprises took place on normal open market commercial terms (on an arm's-length basis). The arm's length principle is the principle mostly used by countries and companies in their discussion of transfer pricing. Olivier and Honiball (2008:491) described the arm's length principle as operating on the basis of taxing each company within a multinational group separately as if transactions between them were independent transactions at arm's length. They added that this method is used by countries that are members of the OECD or non-members who subscribe to the OECD Model Tax Treaties. South Africa falls into the latter category. South African income tax requires that residents adjust a price to an arm's-length price if goods and services are provided by a resident to a non-resident, if the parties are related to one another, and, lastly, if a price is more or less than a price that would have been fetched in an arm's-length transaction (Stiglingh *et al*., 2008:539).

Transfer pricing plays an important role for the tax manager of a multinational corporation as it could benefit the corporation greatly. Optimal tax planning for a multinational would be to include a strategy to use transfer pricing to conduct operations with low taxable income in high tax jurisdictions and create high taxable incomes in lower tax jurisdictions (Yancey & Cravens, 1998:266). The incentives for income shifting depend on the differences in corporate tax rates between countries and the system that residence countries use to avoid double taxation (Bartelsman & Beetsma, 2003:2228). Transfer pricing can also be used to shift intra-group income into high tax countries that utilise a number of tax benefits, or where the group is able to utilise tax losses (Olivier & Honiball, 2008:484). This can greatly reduce the tax burden faced by corporations; it however also reduces the tax revenue of the country. The use of transfer pricing is not free to interpretation of the individual or company making use of it; it has to be utilised

correctly with all the necessary requirements fulfilled. Incorrect use of transfer pricing or inadequate practices can result in penalties from the respective countries involved. The penalties differ from country to country and should be researched with regard to the individual country involved.

2.6.2. Thin capitalisation

Thin capitalisation is often regarded as a category of transfer pricing, as it relates to the funding of a business with a disproportionate degree of debt to equity (Stiglingh *et al*., 2008:538). The aim of this is to provide the investor with a return exempt from tax. Olivier and Honiball (2008:510) firstly described thin capitalisation by explaining that interest is tax deductible, while dividends are not tax deductible. They went further and stated that dividends are paid out of after-tax profits, while interest is generally paid by utilising profit before tax. It consequently is beneficial for multinational groups to fund their overseas operations by way of debt as opposed to equity. Picciotto (1992:202) adds that inter–affiliate interest payments may be more flexible and easier to repatriate than the declaration of dividends. This is due to the fact that interest received may sometimes be tax exempt, while dividends are liable for full taxation. Companies may also use hybrid instruments that are treated as debt in the payer's country, but as equity in the recipient country.

The principles or rules used to govern and guide the use of thin capitalisation, once again, are set out by the OECD in their Model Tax Convention (OECD, 2008:179). It is article 9 of the Model Tax Convention that deals with the issue of thin capitalisation. This article uses the principle called the arm's length return method. This identifies the assets and a factor of production employed by each party, and allocates to them a market rate of return (Picciotto, 1992:218). The basis of the arm's length return method is that it attributes the profits on the basis of those of comparable companies in the industry. This, therefore, resembles an empirical research or method that is internationally permitted by countries. There are, of course, a number of provisions and laws that are aimed at preventing the abuse of opportunities such as transfer pricing. The South African government has applied provisions that are aimed at limiting the deductibility of interest on excessive debt funds, thereby protecting the South African economy against distortions from heavily geared companies (Stiglingh *et al*., 2008:539). It is common and correct for a country to protect itself and its economy against possibly harmful practices. The

penalties are similar to those used in the case of transfer pricing, especially as it is a form of transfer pricing. The penalties differ, of course, in respect of the different countries in which the companies are based. Stiglingh *et al*. (2008:540) pointed out the ratio of debt to fixed capital is considered in order to determine whether the financial assistance is excessive or not. This helps to determine whether the use of debt by the company is a harmful practice to South Africa or not.

2.6.3. Conclusion

Transfer pricing and thin capitalisation are useful techniques for a company when shifting profit or income across international boundaries. However, companies need to be aware of the correct and full implications of the law before utilising these methods. Incorrect execution of these methods may have serious repercussions and incur penalties to companies if they are not aware of the conditions of the methods, or if they choose to abuse and misuse the methods available to them. Correct use of these methods could result in companies achieving large tax savings and benefits in the countries in which they operate. Companies need to consult the OECD guidelines as well as the stipulations of the countries in which they are planning to operate. The guidelines are of the utmost importance and comprise the key to benefiting from using the two methods of profit-shifting.

2.7 Tax competition

Globalisation and the convergence of world economies have brought about a number of changes in the world of business. Tax competition is one of the changes brought about by globalisation. Tax competition refers to competition between countries to attract FDI by using taxation and taxation incentives. Tax competition has had a number of effects on the countries that have used such methods to attract FDI. The main concern of organisations and countries is that tax competition will bring about the "race to the bottom" (Azemar & Delios, 2008:89; Davies & Ellis, 2007:1425; Killian, 2006:1082). This term refers to a situation, in theory, which will occur if countries repeatedly reduce their tax rate to compete with other countries. The concern is that the race to the bottom will reduce taxes to an insufficient rate and result in lower public spending.

Harmful tax competition is increasing in the world. Tax competition can be seen as harmful when it draws business and capital away from a significant number of jurisdictions in large amounts to reduce the potential tax revenue that would otherwise be generated (Deprez,

2003:375). A number of studies have been undertaken to investigate the effect of globalisation on worldwide tax rates. Their results of course, showed variations. Bretschger and Hettich (2002:714) found that national governments lower corporate taxes as a result of increased globalisation, which they say is consistent with the predictions of the tax competition theory. This is consistent with research done by Devereux, Lockwood and Redoano (2008:1230), who investigated the OECD countries to determine the extent to which governments set taxes in response to changes in the tax rates of other countries. Their research found strong evidence that governments do respond to changes in other countries' tax rates. Wunder (1999:350) reported in his study that there has been trend toward converging international corporate income taxes since the 1980s. He also found that all countries covered in the study engaged in tax policies that reduced the corporate tax rate by 10 percentage points during the 1985 to 1997 period.

The sources mentioned above give a clear indication that globalisation has had a considerable effect on tax rates applicable between countries. It has shown that tax rates between countries are converging; decreasing in line with each other and also that there is a clear indication that countries are engaging in tax competition. The concern is not about the convergence of the tax rates, but rather that tax competition will reduce taxes to a level that is not enough to sustain a country's development.

According to Deprez (2003:375), tax competition has a number of negative effects. These effects include contributing to the fiscal crisis of the welfare state, and also lowering tax revenues and leaving governments less capable of meeting the social spending demands or lowering social spending. Livingston (2000:743) added that tax competition is a significant contributor to making tax structures more regressive and therefore widening the gap in the distribution of income and wealth. Tax competition, however, has important implications for companies engaged in international operations, or companies considering doing so. It shows that taxes are being lowered and that countries are in competition to attract FDI to their countries. This is a benefit to them as countries are willing to provide incentives to attract their business.

2.8. Conclusions

Taxation is an important consideration for any company undertaking business. This is true whether companies are operating in the domestic market only, or engage in foreign operations. The difference with foreign operations is that it complicates the matter of taxation considerably.

The relevant taxation laws have to be studied in both the home and the domestic market. This may be further complicated when double taxation becomes due because the two countries do not have the necessary double tax agreements.

A number of ways and provisions set out by various institutions aiming at combating double taxation has been indicated. In addition to being liable for tax in two countries, some advantages are also available. These come in the form of tax avoidance and reduction through transfer pricing, thin capitalisation and the use of international tax havens. Other advantages such as tax incentives offered by various countries and states have also been discussed. There is also a great deal of benefit that a company may obtain towards reducing its tax liability. This chapter has presented the mentioned factors and provided some insight to what companies may be faced with. It has also been shown that there is a possible downward trend in the various rates of taxation within countries. This is due to the fact that countries are competing for FDI through the use of the tax rate, and also because global integration has led to the lowering of many countries' tax rates.

A great deal of insight into some of the relevant aspects that need consideration when thinking about making capital investments abroad, has been offered in this chapter. It has also been shown that taxation and a home country's legislation should be studied in conjunction with the relevant aspects of the host country. In addition, it has been shown that taxation does not have a negative effect only, but that positive influences may also prevail. Overall there are a number of ways and methods that have been introduced that make international business friendlier to participants.

CHAPTER 3

INFLATION RATE, INTEREST RATE AND FOREIGN EXCHANGE RATE CONSIDERATIONS

3.1 Introduction

This chapter will deal with the inflation rate, interest rate and foreign exchange rate considerations that a company contemplating capital investments abroad, may encounter. These variables are determinants of the business climate in the foreign and domestic market. While these economic variables have a close relationship with each other, they also influence other variables. These factors need to be discussed and considered individually and collectively.

Jordan (2006:487) stated that inflation refers to making something larger, but what is increasing is the amount of money required to purchase the same basket of goods over time. Inflation may be experienced in all countries, although the degree of inflation varies. Doing business domestically will only expose a company to the local inflation considerations. It obviously becomes complicated when the company has to take the inflation rate of the potential host country into consideration, too.

A similar situation prevails when the interest rate factor itself is taken into account. It, too, has various rates in all countries, and when considered in the context of the foreign countries' interest rates, it becomes increasingly complicated. Measurement, calculation, forecast and determination of the foreign exchange rate have produced complicated results and conclusions. Of the three factors the foreign exchange rate also appears to be the most researched and discussed variable. This is due to the range of theories that are aimed at explaining the economics of the foreign exchange rate.

Inflation rate, the interest rate and the foreign exchange rate are important when considering making capital investments abroad. Their importance will be shown, as well as their individual and combined effects. These will be discussed in the following sections of this chapter.

3.2 The inflation rate

Bierman and Smidt (2007:334) have described inflation as a rise in the average price level, while deflation is a decline in the price level. If there is a strong tendency for many prices to move up or down, then this will cause a change in the average price level. Inflation is usually measured by an index such as the consumer price index. The aim of the consumer price index is to measure the average price of goods consumed by an average-sized middle income urban family. There are a number of different variations to the consumer price index, as well as a number of different indexes other than the consumer price index.

Inflation has been shown to have a number of effects on other areas of the economy. These effects and relationships, including the relationship between inflation and the foreign exchange rate have been well documented in a number of studies. This, however, will be discussed in the sections to follow.

Valdovinos (2003:173) studied the relationship between inflation and economic growth in the long run. He concluded that there is a strong negative relationship between inflation and a country's rate of growth in the long run. Judson and Orphanides (1999:132) have reached a similar conclusion, indicating that high inflation and volatile inflation are both associated with negative economic growth. Burdekin *et al*. (2004:529) added that inflation has a more serious negative impact in industrial countries than in developing countries. Emerging market countries furthermore must begin to worry when the rate of inflation is in the 20% to 40% range, which was the threshold within their study. Ruge-Marcia (1999:356) published a paper that studied the relationship between government expenditure and the dynamics of high inflation. The study's empirical results indicated that inflation is significantly higher and more volatile in a country that has a high government spending rate. Deme and Fassiya (1995:1221) have found that there is a positive relationship between the growth of money supply and the domestic rate of inflation for Egypt and Morocco, but not Tunisia.

There also exists a relationship between the expected rate of inflation and the actual inflation rate. Azam (2001:198), in his study of macroeconomic instability in Madagascar, found that inflation is the fundamental component of macroeconomic instability. Holman and Rioja (2001:516) indicated that an increase in expected inflation reduces steady-state investment expenditures, hours worked and output. Finally, Heer and Sussmuth (2007:298) found that

inflation makes the distribution of wealth even more uneven. This is due to the fact that higher unanticipated inflation reduces real interest income for the low- and medium-income households and increases profit for high-income households. This is due to the fact that rich people tend to invest in the stock market and equity, while poorer people invest in cash which earns interest. As inflation increases, low income households try to reduce their proportion of savings held in money and try to invest in assets. They incur transaction costs that usually are high, which rich people can bear, but poor households are not able to absorb. Aperigas and Eleftheriou (2002:232) stated that the rate of inflation also seems to affect the prices of stocks. This happens in two ways. Firstly, it has an impact on future earnings, which is crucial to the theory of stock valuation. Secondly, it affects the discount rate that investors use to evaluate the future earnings.

Jordan (2006:487) stated that the ideal situation in which businesses and households make decisions is in the absence of inflation. Inflation has been shown to be related to a number of economic indicators and factors. It has a mostly negative effect on an economy, business and other economic determinants. However, inflation may not have to be a truly negative and uncontrollable factor in an economy. There are ways that inflation can be managed, or at least be kept within acceptable limits. The most common method, referred to as inflation targeting will be discussed in the next section.

3.2.1. Inflation targeting

Nessen (2002:327) has stated that inflation targeting, in theory and practice, is most often focused on stabilising the annual inflation rate. Reynard (2007:1442) added that most central banks have an admissible range for the inflation rate and their concern is to prevent substantial and persistent drifts above or below the range. The most important part of this is that inflation should be kept within the range set out. Ghazanfar and Sevcik (2008:71) stated that inflation targeting had first been used in New Zealand, and its use has since spread to a number of other countries. South Africa has also since then been occupied with inflation targeting. It is a macro-monetary policy tool by which the adoption of an explicit inflation target produces a stable and relatively low inflation rate. It can also lead to enhanced credibility, accountability and transparency. Carare and Stone (2006:1313) added that, by attaining high and stable growth in the long run, monetary policy will be able to reach its ultimate objective of maximising social welfare. A number of studies have tested and discussed the effectiveness and purpose of inflation

targeting. This is important, as having an inflation target in place brings some promise that a country is concerned about maintaining and managing the rate of inflation within the country.

Inflation targeting is relatively new in Brazil, but has been shown to have great importance in maintaining a low inflation rate (Minella *et al*., 2003:1039). Ghazanfar and Sevcik (2008:80) said that they have found that inflation targeting has been quite successful in maintaining inflation in less developed countries. They added however that it has worked better in less developed countries than developed countries. Furthermore using inflation targeting for an already mandated objective would improve the transparency and accountability of monetary policy (Meyer, 2002:161).

The use of inflation targeting should also be considered when making capital investments abroad. It should be considered alongside the effects of inflation in the foreign and domestic market. When the foreign country has it in place, it could have a positive impact on the company. This is due to the fact that it can bring about a stabilisation of the business climate, economic cycle and general conditions of the country.

3.2.2. Inflation and the cost of capital

Inflation does not only have an effect on the economic environment of the country, but it also affects companies. It plays a role in the determination of the cost of capital. Bierman and Smidt (2007:343), as well as Gitman (2000:262) have said that the nominal rate of interest has two components, a real return and an adjustment for inflation. An increase in the expected inflation would bring about an increase in the inflation premium, and as such raise the required return on assets.

Correia *et al*. (2007:9-6) indicated that, when a company analyses an investment project, it uses the company's cost of capital. The cost of capital is a combination of debt and equity used by the company. Investors will, of course, be concerned with protecting themselves against a decline in their purchasing power, and will require an additional rate of return for inflation. It has been mentioned above that the nominal rate of return includes a premium for inflation and, as the cost of capital for a company is usually a nominal rate of return, it has the inflation premium included. Correia *et al*. (2007:14-13) have shown, too, that a higher rate of inflation produces a

lower real after-tax cost of debt, given a nominal cost of debt. This could have an effect on the capital structure as it may encourage a higher degree of financial leverage.

The preceding discussion has shown that inflation could affect the cost of capital and the capital structure. Inflation should therefore be taken into account, both in the home and in the foreign market. It may be that the foreign rate of inflation far exceeds that of the home country; this could affect the company's decision about which form of financing to use and also from which country to obtain the financing. Careful consideration of this could bring about savings for the company. They need not be considered in each country only, but a direct comparison needs to be done in conjunction with one another.

3.2.3. Inflation, profit, cash flow and the cost of input

The profit of a company is also exposed to the effects of inflation. This is because inflation reduces the value of money over time (Correia *et al*., 2007:2-25). Thus the profit of a company may seem to be growing from year to year, but if it is not keeping up with or beating the inflation rate, there is no actual growth. Inflation does not affect the profit only, but also the cash flows of a company when doing an investment analysis (Bierman & Smidt, 2007:334). This is due to the fact that the purchasing power of the cash flow will differ under inflation.

Inflation also raises the cost of inputs and resources that companies need in their production processes. Labour is one of the resources that are used in the production process. When inflation occurs and prices inflate, so does the price of labour. Braumann (2004:145) found that inflation causes a shift against labour-intensive goods.

An overall increase in inflation therefore has a negative effect on profit and the cost of labour for a company. An increase in inflation lowers the real profit of a company. It also has the same effect on wages for an individual. Over time, an increase in inflation will lead to a demand for a higher wage as the real wage will be reduced. This, once again, has a negative effect on a company as it increases the cost of labour. The combined effect of inflation in the home and foreign country can either be reduced or increased; and the combined effect is of greater importance than either factor in isolation.

3.3 The foreign exchange rate

The foreign exchange rate is defined by Gitman (2000:833) as the value of two currencies with respect to each other. Doing business internationally exposes a company to an increase in risk. One of the risks that contribute to the increase in risk is the foreign exchange rate risk. This is the risk caused by the variation of foreign exchange rates between two countries. Copeland (1994:4) has said that foreign exchange rates can be simply thought of as prices. When buying an item, it changes hands, while the price paid is the exchange rate. Foreign exchange rates are available for most countries and the foreign exchange market is rather large. There also are a number of ways in which these rates are quoted, but they are not discussed here as part of this study.

Gitman (2000:837) has said that a company that has businesses in multiple countries is subject to various types of exposure due to the foreign exchange rates. The first is accounting exposure and this occurs where individual accounts in the company's financial statements are affected by foreign exchange rate fluctuations. The second variation is an economic exposure and entails the potential impact of foreign exchange rate fluctuations on a company's value. The foreign exchange rate consideration is therefore one of the most important considerations for a company that is considering making capital investments abroad. A company may have a significant positive profit in the foreign country, but that might change once the profit needs to be shifted back to the home country. This is due to the fact that the foreign exchange rate is constantly changing. This may have a negative combined effect as the company may sustain losses, or devaluation of the amount obtained, once the currency is exchanged.

A large number of studies have been undertaken to explore the relationship between the foreign exchange rate and exchange rate volatility, and a company's decision to make a FDI. The results of the studies consulted all seem fairly consistent. Kiyota and Urata (2004:1528) reported that depreciation in the host country's currency attracts FDI, while large volatility in real exchange rates discourages FDI. Benassy-Quere, Fontagne and Lahreche-Revil (2001:190) agreed with Kiyota and Urata's (2004) findings. Ang (2008:188) gave as a reason for the relationship between foreign currency depreciations and increases in FDI, which is the fact that a depreciated currency will lead to a position of higher relative wealth in the host country and may, as such, lower the relative cost of capital. Sung and Lapan (2000:422) added that exchange rate volatility creates opportunities for multinational companies to move production to lower-cost plants. Chen,

Rau and Lin (2006:282) indicated that exchange rate uncertainty has a negative impact on a company's outward FDI as investment is irreversible over the long term.

Foreign exchange rate uncertainty has been shown to have a negative effect on FDI. The only positive effect is obtained when the host country's currency depreciates against the home country of the investor. The foreign exchange rate is a constantly changing phenomenon that is experienced in and amongst all countries. Further discussion of the foreign exchange rate of different countries is needed as there are a number of determinants of exchange rates and also a number of factors that affect the foreign exchange rate. A brief history of the international monetary system is provided in the next section. It is important as there have been a range of foreign exchange rate regimes that have been used by various countries. It is also necessary because different regimes have evolved over time and the regime used by a country could have affected a company's decision to invest abroad or not.

3.3.1. The international monetary system and foreign exchange rates

The international monetary system has undergone various changes over the last century. Some of the different foreign exchange regimes of different nations have lasted and some have not. Currency regimes and their use are dated far back, but the older regimes will not be discussed. The Gold Standard and the Inter-War period were currency regimes that occurred late in the 1800s and early in the 1900s, and they will most certainly not be discussed (Abdullah, 1987:19; Eiteman, Stonehill & Moffet, 1993:24). Although they had a role to play in the shaping of the international monetary system as it is today, they have no implications for companies in operation today.

3.3.1.1 The Bretton Woods Agreement

The United States of America is the only country whose economy had not been partially destroyed by World War Two (O'Brien, 1996:32). The USA then established a leadership role in rebuilding the monetary system along with Japan and Europe. Abdullah (1987:20) explained that the agreement was established between world powers at a meeting in Bretton Woods, New Hampshire, during 1944. The super powers, along with their monetary experts, produced a formula that would re-establish the growth in world trade and the reconstruction of economies that were badly affected by World War Two. The formula or system that was agreed upon was to be known as the Bretton Woods System. Eiteman, Stonehill and Moffet (1993:25) stated that the

agreement was essentially a dollar-based monetary system. All countries had to fix the value of their currencies in terms of gold, although they were not required to exchange their currencies for gold. This is due to the fact that only the dollar could be converted to gold at a fixed price. Krueger (1983:3) explained that the function of the system was to be able to monitor the rates of foreign exchange between countries, with the aim of avoiding a situation in which countries found themselves in disequilibrium, and could devalue their currencies to avoid problems of high domestic unemployment. This also prevented countries from competitively devaluing their currencies, which would have a negative effect on their neighbours. While the Bretton Woods System was intended to be an adjustable foreign exchange rate system, it became a fixed rate system because many countries were reluctant to devalue their currencies.

The Bretton Woods System eventually failed in 1973 (O'Brien, 1996:33). This was due to the fact that the rate of foreign exchanges was fixed and could not be adjusted internationally according to the law of one price. This law states that, in a system of market-determined foreign exchange rates, the price of a good in one country should equal the price of the same good in another country. This is one of the factors that eventually caused the downfall of the Bretton Woods System. Krueger (1983:5) has pointed out that many countries questioned the fact that the dollar was used as the key currency and the provider of international liquidity. The system that followed next is the current system, the floating foreign exchange rate regime.

3.3.1.2 The floating foreign exchange rate regime

The floating foreign exchange rate system was introduced in 1973 as the successor to the Bretton Woods System. O'Brien (1996:38) has explained that the rationale for floating foreign exchange rates is that market forces will determine the correct value. It was hoped that this new system would not be exposed to all the problems that the Bretton Woods System incurred. When demand and supply pressures arise from international trade and investment, floating foreign exchange rates should be able to change to the correct value of the currencies. Abdullah (1987:31) stated further that monetary authorities are allowed to intervene in exchange markets when they consider it necessary to maintain order. Eiteman, Stonehill and Moffet (1993:33) stated that foreign exchange rates have become more volatile and less predictable since the introduction of the floating foreign exchange rate regime. The volatility is proposed to be due to a number of shocks that have occurred to the monetary system since its introduction. Eiteman *et*

al. (1993:45) have added that, with the floating foreign exchange rate regime, exchange rates adjust a little every day, which is different to the fixed rate regime where large one-time fluctuations were experienced.

Eiteman *et al.* (1993:32) presented a list of arguments that have been used in favour of the flexible foreign exchange rate regime. Firstly, it includes the fact that countries do not have to maintain a large amount of reserves to defend their foreign exchange rates. Secondly countries may also maintain an independent monetary and fiscal policy without worrying about the effect on the foreign exchange rate. Thirdly, it is argued that flexibility allows a smoother adjustment to external shocks. This is in contrast to what has happened after its introduction in 1973.

3.3.2 Determining the foreign exchange rate

Foreign exchange rate determination has been studied extensively. The problem with discussing exchange rate determination as a branch of economics is that it is explained by a number of theories. These theories are derived from different views and, as such, make the intended brief discussion difficult.

Brooks *et al*. (2004:528) found that a surplus in the country's domestic current account brings about an appreciation of the domestic currency relative to its trading partners. They have also found that an increase in the investment portfolio which flows into the domestic country, causes an appreciation in the domestic currency. This occurs due to the enhanced attractiveness of the domestic economic activities. Hau (2002:622) found that the degree of openness of an economy may have a negative relationship with the level of volatility of exchange rates. Hsing (2007:787) added that expectations about future foreign exchange rate behaviour play a significant role in determining the exchange rate. Chinn (2003:7) lastly provided valuable input regarding the determination of foreign exchange rates and pointed out that the foreign exchange rate between countries had consistently outperformed (positively and negatively) the "random walk" in the prediction of future foreign exchange rate movements. It was also stated that interest rates have been seen to predict future foreign exchange rates quite well, although this could only be done well in the long run.

3.3.3 Foreign exchange rates and inflation

After having reviewed the literature on foreign exchange rates and possible determinants, it has become clear that inflation plays an important role in determining foreign exchange rates. Gitman (2000:835) has suggested that the best explanation of changes in long-term foreign exchange rates is the differing inflation rate between two countries. Countries with higher inflation rates experience depreciation in their currency relative to the currencies of countries with lower inflation rates. Azam (2001:193) found proof that the model predicts that the inflation and the foreign exchange rates are determined simultaneously (Golinelli & Rovelli, 2005:193). This leads to the conclusion that a monetary policy that will lower inflation rates will eventually stabilise the foreign exchange rates. Dornbusch (1987:13) proposed that the foreign exchange rate also affects the inflation rate, as changes in imported commodity prices influence the rate of inflation for food, directly and hence influences the level of wages. A comparison of the combined home and foreign countries' effects needs to be undertaken. This is because financial decisions need to combine the two effects of the foreign exchange rates and the foreign inflation rates when evaluating the impact on the decision to make capital investments abroad.

3.4 The interest rate

The interest rates of the home and of the foreign country are factors that require attention before considering making capital investments abroad. The structure and level of interest rates are the factors that are important, with the structure referring to the combination of the real interest rate and the inflation rate, to arrive at the nominal level of the interest rate. Bhattacharya, Bhanumurthy and Mallick (2008:900) reported that the interest rate has come into sharp focus since the era of high globalisation, because the domestic financial sector has become increasingly integrated with the external world. This has caused the restrictions on cross-border capital flows between countries to decline, which has affected the behaviour of the domestic economic factors, including the interest rate.

The interest rate has a number of different variations, the most recognisable and widely referred to are the long-term and short-term interest rates. Dua and Pandit (2002:874) stated, as is widely acknowledged, that high interest rates have a number of negative effects on a company. These effects include increasing the debt burden of a company, escalating the cost of financing and, lastly, tightening the profit of a company. Pattanaik and Mitra (2001:4419) added that high

interest rates increase the chance of corporate default and may also weaken the asset quality of domestic banks.

Warnock and Warnock (2009:11) found that increased foreign capital inflows have a significant impact on long-term interest rates, decreasing the rates. Furthermore it has been found that an inflow of capital equivalent to 1% of the gross domestic product is associated with a 19 basis point reduction in long-term interest rates. It has also been found that higher inflation rates and growth expectations are associated with higher long-term rates.

Bhattacharya, Bhanumurthy and Mallick (2008:908) found that the expected foreign exchange rate and the foreign interest rate play a significant role in the determination of domestic interest rates in India. The foreign interest rate is reported to have a one-for-one increase on the domestic interest rate. The expected foreign exchange rate and the domestic interest rate may have a relationship. This is due to the fact that the demand for foreign currencies increases when depreciation of the currency in the home country is expected. This, of course, may lead to an increase in the outflow of domestic currency, and may eventually decrease the domestic money supply. This, in turn, places an upward pressure on domestic interest rates, and is also the reason why money supply and interest rates may have a relationship. Dua and Pandit (2002:865) stated that, according to their study, money supply is negatively related to the interest rate, which is in agreement with the views of Bhattacharya *et al.* (2008). The role and relationship between the foreign exchange rate, interest rate and inflation rate will be discussed in the next section.

3.4.1 The Fisher Model

Irving Fisher was a well-known American economist who gained fame for his contribution to interest rate and pricing theories (Abdullah, 1987:59). There are two versions of his famous theory named “The Fisher Effect” or “Fisher Model”. The first version is the Fisher Model and the second is the International Fisher Model. The International Fisher Model makes it possible to measure the impact of a change in the interest rate on the foreign exchange rate without going through the process of using an inflation rate and a real interest rate (O’Brien, 1996:90). The International Fisher Model, however, uses a number of assumptions which are central to the proper functioning of the model. The main assumption is that differences in interest rates across currencies are always a reflection of differences in inflation rates. The International Fisher Model is also based on the international law of one price and the theory of purchasing power parity.

Suliman (2005:884) stated that, according to the International Fisher Model, a rise in a country's expected inflation rate will, in the long run, cause an equal rise in the interest rate offered by a deposit of its currency. It thus may leave the real rate of return on domestic assets unchanged. Simply put, it explains the monetary approach prediction that a domestic currency depreciates in the foreign exchange market when the domestic interest rates increase relative to the interest rates of a foreign country. Eiteman *et al*. (1993:155) added that empirical tests lend support to the relationship that the International Fisher model demonstrates. They have cautioned, however, that the Model has shown some deviations in the short-term. The International Fisher Model also shows the importance of the relationship between interest rates in the home and in the foreign country. The interest rate is not only needed for financing and investment purposes, but also to help with the determination of rates for foreign exchange between countries.

3.5 Conclusions

The inflation rate, foreign exchange rate and interest rate are three important factors required for determining the economic environment of a country. They are crucial to the functioning and success of establishing and running a business within a country. At present it is also crucial for considering the economic environment of a country, as most countries around the world are providing investment opportunities. This obviously differs from country to country, but the only true reflection is obtained through research and discussion of the economic factors concerned. It is possible to hedge against some of these factors (using forward rates, or swaps). The availability of these instruments is important to managers. Hedging against foreign exchange rate movements could also be done by the choice of financing used (foreign or local).

The inflation rate affects more than only the relative prices of a country. It plays a central role in determining interest rates and exchange rates. It may also be a contributor to economic instability in a country. Inflation has relationships with economic growth, cost of capital, a company's profit and foreign exchange rates.

Foreign exchange rates seem to be the major factor to consider when making capital investments abroad. The success of the company in the foreign country can be reversed due to a negative effect of foreign currency exchange rates when shifting the profit between countries. Foreign exchange rates have also been shown to have a relationship with FDI. The literature study indicated that depreciation of the currency in the foreign country's exchange rate may increase

FDI and that foreign exchange rate volatility also has a negative impact on FDI. Foreign exchange rates also have a relationship with inflation, which plays a role in the determination of the exchange rate.

The interest rate is expected to impact on a number of financial factors in a country. It is an indicator of the returns available; the costs to be expected for projects; and, also according to some theories, a determinant of the foreign rate of exchange. This is true in the case of the International Fisher Model in which the interest rates play a central role.

Full consideration of the three financial factors that are mentioned in this chapter is crucial. They are individually and collectively important in determining each other, as well as the financial feasibility of capital investments in foreign countries. It is not only the financial environment in a particular foreign country that is important; but the comparison between the conditions in the home and in the foreign country is also of prime importance for a company to make a proper financial decision.

CHAPTER 4

CAPITAL STRUCTURE AND THE COST OF CAPITAL

4.1 Introduction

The cost of capital and the capital structure are concepts that are dependent on each other. Correia *et al*. (2007:7-25) defined the cost of capital of a company as the minimum rate that must be earned in order to satisfy the combined required rates of return of the company's providers of capital. Auerbach (1983:905) provided a simpler definition of the cost of capital by identifying it as the price paid for the use of capital resources over a defined period of time, and hence the discount rate that companies should use in evaluating investment projects that transform current inputs into outputs.

Capital structure, on the other hand, is defined as the proportion to which a company decides to use various sources of finance. Brigham and Daves (2004:994) extended their definition by saying that capital structure is the way in which a company's assets are financed. They also stated that the capital structure is normally expressed as a percentage of each type of capital used by the company, such as debt, preference shares and common equity. An important definition for this topic is the aspect of the weighted average cost of capital (abbreviated as WACC). WACC is defined by Brigham & Daves (2004:1012) as the weighted average of the after tax costs of debt, preference shares and common equity, where each weighting factor is the proportion of that type of capital in the optimal or targeted capital structure. WACC is then calculated by multiplying the cost of each type of capital by the ratio of the market value of that form of financing to the market value of all the forms of financing of the company (Bierman & Smidt, 2007:207). This shows that the cost of capital is determined by the capital structure, but this relationship could differ according to the individual view expressed. According to Eiteman *et al.* (1998:406), a company has an optimal capital structure if the particular mix of debt and equity minimises the company's cost of capital for a given level of business risk. This occurs when taxes and bankruptcy costs are included as considerations.

4.2 Capital structure

The capital structure is a much discussed topic in most texts on Financial Management. It is defined by Lambrechts (1990:7) as the liability side of the balance sheet and, therefore, the composition of the shareholder interest and borrowed capital of the enterprise. Correia *et al.* (2007:14-1) added that the way in which financing is arranged is a strategic financial decision; the result of that decision is the capital structure. Gitman (2000:504) stated that the capital structure is complex as it has interrelationships with many other financial variables. A high cost of capital and, therefore, lower net present values, are results of incorrect capital budgeting decisions. Effective capital structure decisions can, however, lower the cost of capital and increase the net present values of investment projects. Effective decisions can increase the net present value of a company's investments, and also increase the value of the company itself. Capital structure therefore has an important relationship with a company, as its effects and interrelationships are spread to many other areas of the company's financial variables.

4.2.1 Modigliani and Miller

Capital structure has been a topic of increasing interest over the last few decades and is extremely well researched. This has been the case since 1958 when Modigliani and Miller first published their influential paper titled "The cost of capital, corporate finance and the theory of investment" in The American Economic Review (1958:261). Modigliani and Miller have since been recognised as pioneers of the topic of capital structure and have also sparked the thinking behind many other studies undertaken by various authors since their first publishing. Since the first introduction of their paper, a number of modified versions and corrections to the paper have been issued. Correia *et al.* (2007:14-7) provided a simpler explanation of the contributions of Modigliani and Miller, as the original paper is dominated by mathematical models and assumptions that are not easily understood. Correia *et al.* (2007:14-7) reported that Modigliani and Miller argued that there is no optimal capital structure because, irrespective of the level of gearing, a company's WACC will not change. It is argued that this assumption may increase the risk incurred, which will then affect the shareholders' equity as they will now require a higher compensation for the increase in risk. The fundamental principle in this argument was that the assets determine the value of the business and not the way in which the assets are financed.

Modigliani and Miller's (1958:262) theories were based on a number of assumptions which have to be realised for the model to function as a relatively accurate representation of a real-world phenomenon. In 1963, another version of the model was introduced in which the assumption of no corporate taxes being in place, was relaxed. Brigham and Daves (2004:498) have provided a basic explanation of this; they start by explaining that interest is a tax deductible expense under tax laws of many countries, while dividend payments are not. This tax treatment encourages companies to use debt in their capital structures, which results in interest payments reducing taxes paid by corporations, and this increases cash flow availability to investors. The process of saving due to the deductibility of interest payments is called the present value of the tax shield, as the tax deductibility of interest payments shields the company's pre-tax income. Correia *et al*. (2007:14-9) added that, as debt increases, the value of the company is increased by the present value of the tax shield. The Modigliani and Miller model of 1963 signalled the start of the realisation of the benefits of the relationship between tax, interest payments and company value. It has since been recognised as an important aspect of any discussion regarding the capital structure of an enterprise. Loof (2004:462) recognised the fact that the main incentive for companies to borrow, is to take advantage of the tax shield. While Modigliani and Miller have also introduced a number of other changes to their original model since 1958 and 1963, these are not applicable for the purpose of this study. The inclusion of the first Modigliani and Miller models is important, however, as they introduce the advantages of debt financing and interest payments.

4.2.2 Capital structure theories

Since the introduction of Modigliani and Miller's (1958:262) theory, a number of other theories have been published in the field of corporate finance. These theories are introduced to explain the choice of composition of the capital structure of a company. They may not all remain true in a real-world context; they do, however, provide a great deal of insight into the workings of the capital structure.

4.2.2.1 Trade-off theory

The Trade-off theory is one of the major theories of capital structure and is discussed in most major financial management texts. D'Mello and Farhat (2008:214) reported that, according to this theory, a company weighs the marginal cost and benefit of debt in determining the optimal

capital structure. At the optimum debt ratio, a company's market value is maximised and a company whose leverage ratios deviate from the optimum can increase their value by moving their debt ratios to this optimum. According to Brounen, De Jong and Koedijk (2006:1430), the basic principle of the trade-off theory is that it predicts a trade-off between the tax advantages and bankruptcy costs of debt. Simply put, the bankruptcy costs and tax benefits are the prevailing determinants of leverage in the trade-off theory. It is stated that companies balance beneficial tax shields with financial distress costs when determining the appropriate amount of corporate debt. This theory is in contradiction of the propositions set out in Modigliani and Miller's model, although the model introduced by Modigliani and Miller (1963:433) played an important role in the derivation of this theory.

4.2.2.2 Pecking-order theory and the Signalling theory

Another common theory used to explain the capital structure is the pecking-order theory. According to Bagley, Ghosh and Yaari (1998:158), a company sets its dividend policy to accommodate long-term growth opportunities. Sources of cash that are available to meet the changing investment needs are chosen on the basis of their associated costs. Correia *et al.* (2007:14-11) stated that the pecking order theory assumes that there is no target capital structure. The theory is consistent with that of Bagley, Ghosh and Yaari (1998:158), but it is added that the capital sources are chosen according to a preferred hierarchy. This hierarchy accommodates two attributes that managers value, namely flexibility and control. The first chosen form of capital used, according to the hierarchy, is retained earnings. Brigham and Daves (2004:502) stated that, in addition to using retained earnings, companies also tend to sell off their short-term marketable securities to raise funding. These authors agree with other sources that the next step companies will take to raise funding would be to issue debt or preferred stock. The last source of financing will be to issue new common equity. Correia (2007:14-11) added that companies will be reluctant to issue new equity, which might be under-priced, because it may be seen as a negative signal by market participants. Simply put, the theory states that management will use the lowest cost of financing.

The signalling theory ties in directly with the end of the previous paragraph as the use of capital is done in a similar manner. This is a common theory and is discussed in most texts covering corporate financing decisions. Correia *et al.* (2007:14-12) have provided a good explanation of

the signalling theory. They commenced by saying that the issuing of equity acts as a signal to the market that management perceives the shares to be over-valued. Thus, if the company has profitable opportunities available to them, they will rather use retained earnings or debt. The use of debt is viewed as a positive signal as shareholders wish to retain all the benefits to them. Brigham and Daves (2004:502) agree that an equity offering is viewed as a signal by management that a company's prospects are not promising. Thus, according to this theory, companies should avoid the issuing of new equity and try to use debt as much as possible.

These theories are an important part of any discussion regarding the cost of capital or the capital structure of companies. They may not always hold and they might contradict each other, but they are important in determining the financing decisions of a company. While a number of other theories have been studied and researched, the ones discussed are the most common and most significant in relation to others and therefore are necessary for the purposes of this study.

4.2.3 Determinants of a capital structure

Capital structure has been defined above as the proportion of the various forms of capital used. Capital structure plays a role in other aspects of the business and there are a number of factors that affect the capital structure of a company. Capital structure is not of a static nature, but changes over time. A large number of studies have examined the relationship between various external and company-specific factors, and have assessed the effect that these have on a company's capital structure choice. The respective studies not only researched the determinants of a capital structure, but also the differences between companies in different industries and with different characteristics. The studies showed varying results, which is normally expected. Many studies employed different definitions for the variables used in the studies. The definitions are not important, but rather the results which are derived. The main problem that studies have to face is the choice whether to use market or book value of the forms of financing, as an incorrect choice could bring about considerable changes in the company, especially with the difference between market and book value being so large.

Bhaduri (2002:664), in his study of India, found evidence that factors such as growth, size, cash flow, uniqueness and industry characteristics can influence the optimal choice regarding capital structure. A study by Chang, Lee and Lee (2009:211) identified similar factors for the determinants of capital structure. They chose to examine seven factors and assess their effect and

relationship to the capital structure. The seven factors were as follows: growth, profitability, collateral value, volatility, non-debt tax shields, uniqueness and industry characteristics. They found that, in terms of relative impact on a capital structure, growth was the most influential determinant of capital structure, but its effects varied according to the definitions of growth that was used. The first definition resulted in growth being a negative factor with regard to capital structure, while the other definition resulted in growth being a positive factor. This was followed by profitability, which was named the second most influential factor for a capital structure. In their study, Wu and Yue (2009:38) concluded that tax is a big determinant of changes in a capital structure. They found that companies with higher tax rates employed higher amounts of debt in their capital structures. They also found that companies with higher levels of bank access use higher levels of debt.

4.2.4 Multinational capital structure

A company such as a multinational corporation that operates outside its domestic market will find that the issue of capital structure becomes increasingly complicated. Mittoo and Zhang (2008:719) found that the capital structure of a multinational company is determined by a complicated interaction between home and host country factors, as well as by their expansion in global markets. Huizinga, Laeven and Nicodeme (2008:81) added that, in an international setting, the after-tax costs of debt and equity financing are dependent on the tax systems of the home and the host country. Stulz (1999:11) furthermore indicated that, when a country's capital markets are open to foreign investors, the investors share in the economic risk of the country, which increases their risk and the complexities they face. Much of the more recent research on the capital structure concerns the study of international corporate financing decisions, the capital structure of multinational companies and also capital structure differences between countries. Once again, differing results were found according to definitions used, the sample period used and the size of the sample used.

Abdullah (1987:406) added that debt ratio norms differ greatly between countries. Multinational companies have access to international capital markets, which may enable them to raise funds at more favourable terms than in the local market of the affiliates. If they conform strictly to local financial structures, they could be at a disadvantage and operate at a higher cost of capital than if they operated on a worldwide consolidated basis. Multinational companies are also associated

with being larger and as such have better access to debt and loans. A number of other factors, such as different tax structures, numerous debt markets and country incentives to induce investment also provide multinational companies with advantages over companies that operate solely in the domestic market. However, they are also subject to other factors such as exchange rate risk, which plays a big role in cross-border business.

Eiteman, *et al.* (1993:399) reported that there are a number of important variables that have an effect on the cost of capital arising from operating in an international environment. These variables are, firstly, the cost of capital, secondly, whether the national capital markets are segmented or not, whether or not investors are willing to pay a premium for shares of the company to satisfy their international diversification motive, as well as foreign exchange and political risks. The other variables are the taxation policies of the countries; the disclosure required by the countries; the added international availability of capital and the ability to diversify cash flows; and, lastly, the choice of the debt-equity ratio to be used by the foreign affiliate. Most of these variables along with their effects on the capital structure have been studied since the publication of this article (Eiteman, *et al.*1993:399). Most studies consulted use a fairly consistent set of variables, but a few use slightly different variables. The determinants of a multinational capital structure are discussed in more detail in the following section. A number of other variables have also been used in studies, but those discussed in the following sections are the most commonly used and are the most important.

4.2.4.1 Size

The size of the company is an extremely common variable used in capital structure analysis. De Jong, Kabir and Nguyen (2008:1961) stated that larger companies tend to be more diversified, thus size should have a positive effect on capital structure by lowering the risk when more debt is employed. This is consistent with results found by them, as well as by Hirota (1999:217), Rajan and Zingales (1995:1456) and Wanzenried (2006:704). Wanzenried (2006), however, reported that when the definition of size is changed, the positive effects of size only apply to the United Kingdom and not France. In addition, Gordon and Lee (2001:223) found that small companies are more independent of debt than larger companies are.

4.2.4.2 Tangibility of assets

Tangibility of assets may not seem to be an obvious factor in the determination of a company's capital structure, but it is commonly used in studies. The rationale underlying this factor is that tangible assets are easier to collateralise and thus may reduce the agency cost of debt (Rajan & Zingales, 1995:1455). A positive relationship between the tangibility of assets and a company's capital structure would be expected, as the amount that is available to pledge as collateral is increased. Tangibility of assets have been found to have a positive relationship with employing more debt in the capital structure of a company. This has been found by De Jong, *et al.* (2008:1961); Huang and Song (2006:29) and Deesomsak, Paudyal and Pescetto (2004:398). This contrasts with the results obtained by Rajan and Zingales (1995:1455) and Cheng and Shiu (2007:41), who have found a negative relationship between a company's level of tangibility and the use of debt. The latter source has however also found a positive relationship for tangibility of assets and debt once the definition is changed. Caution of this was given earlier, as it is a common occurrence in these types of studies.

4.2.4.3 Profitability

Cheng and Shiu (2007:35) acknowledged the importance of profitability in saying that, according to the pecking-order hypothesis and because of information asymmetries between insiders and outsiders, companies prefer to use internal funds rather than external funds. The result is that debt would be used before new equity is offered. Furthermore, according to the pecking-order hypothesis, companies with higher levels of profitability will have higher levels of internal funds available. Profitability has been found to have a strong negative relationship with leverage (Chen, 2004:1345; De Jong, Kabir & Nguyen, 2008:1963; Deesomsak, Paudyal & Pescetto, 2004:398; Huang & Song, 2006:27; Rajan & Zingales, 1995:1457). Wanzenried (2006:704) has found a similar result, namely that there is a negative relationship between use of debt and profitability, but when the definition is changed Germany seems to have a positive relationship. The only other study that showed a different result was undertaken by Hovakimian, Hovakimian & Tehranian (2004:537) who found that profitability has no effect on the target leverage. This has little effect as the consensus is that profitability has an overall negative effect on the use of debt in the capital structure, which is consistent with the pecking-order theory.

4.2.4.4 Growth

Growth is referred to as future growth prospects that are available to the company. This is important as the choice between debt and equity is determined by the investments undertaken by the company. The investment decision will determine what funding is needed by the company and also will determine the financing options that are to be used. According to Loof (2004:462), there are a number of conflicting conclusions with regard to growth and leverage. This could be due to the fact that a number of proxies are used to represent the growth variable. Deesomsak *et al.* (2004:394) added that a company with higher future growth prospects may tend to invest sub optimally, or invest in risky projects that may expropriate wealth away from the providers of capital. This may raise the cost of debt and ultimately force companies to rely more heavily on internal financing than external financing. Singh and Nejadmalayeri (2004:167) added that companies that are internationally diversified may have richer growth opportunities; this is important as this study will be focusing on companies that are considering expanding internationally.

De Jong *et al.* (2008:1963), Deesomsak *et al.* (2004:404) and Hovakimian *et al.* (2004:537) are in agreement that companies with high growth opportunities tend to have a negative relationship with the use of debt, and as such have low levels of debt. This is due to the fact that they may have an incentive to invest sub optimally in risky projects that may take wealth away from the providers of capital. Such operations result in an increase in the cost of borrowing and growth companies tend to use internal funds or equity rather than debt. These contradicts findings by Chang, Lee and Lee (2009:211); Chen (2004:1345); and Loof (2004:166), that have a found a positive relationship between the use of debt and high future growth expectations. Other conflicting results were also found in the area of growth; Wanzenried (2006:704) found that there is a positive relationship for British companies, while the results are negative for German and Italian companies. Singh and Nejadmalayeri (2004:167), on the other hand, found a negative relationship between growth opportunities and debt, but this was only found for domestic companies.

4.2.4.5 Taxation

A discussion of the determinants of capital structure is not complete without a discussion of the effects of taxation on a company's capital structure. It is one of the most researched topics

affecting a company's choice of capital structure. The reason behind this is that the use of debt capital is considered to be cheaper because it is tax deductible in many countries. This produces a saving on behalf of the interest paying company that is equal to the present value of the tax shield. Wu and Yue (2009:38) added that classical capital structure theory predicts that corporate tax affects the company's choice of the capital structure.

Chen and Shiu (2007:41) found that companies in China that were affected by a higher corporate tax rate, increased their use of debt. This is consistent with findings by Gordon and Lee (2001:222), who concluded that, corporate tax rates had a large effect on debt for companies in their sample. Huizinga, Laeven and Nicodeme (2008:115) found that a company's choice of debt is not dependent on the tax rate in the domestic country only, but also on the international tax differences. Chowdhry and Coval (1998:101) documented a number of implications identified as a result of their study. Three of these implications are important for the purpose of this study, the first being that, if the tax rate in the subsidiary's country is much higher than the tax rate in the country of the holding company, the subsidiary will be financed entirely with debt by the holding company, so that the subsidiary can receive the greater tax benefit. The second is that, if the tax rate in the country of the holding company is much larger than the tax rate in the subsidiary's country, the subsidiary will be financed by the holding company entirely by means of equity. The final implication that is applicable, is that the subsidiary's debt-asset ratio is positively related to the tax rate in the subsidiary's country, and negatively related to the tax rate in the country of the holding company. This is in contradiction with the results found by Guenther (1996:158), who found that US multinational companies with higher foreign tax rates than the US have significantly less long-term debt than other US companies.

Overall, tax rates tend to have a clear positive relationship with the amount of debt utilised by companies, whether in the domestic market only, or in foreign operations. This is crucial as it is a benefit that companies should utilise to their advantage.

4.2.4.6 Non-debt tax shields

Non-debt tax shields are distinctly different from the usual tax shields that were mentioned previously. Chang, Lee and Lee (2009:22) added that non-debt tax shields include depreciation allowances, depletion allowances and investment tax credits. De Miguel and Pindado (2001:79) found that literature on this issue have concentrated on competition between the tax deductibility

of debt and the other non-debt tax shields. Deesomsak, Paudyal and Pescetto (2004:404) found that non-debt tax shields hold an inverse or negative relationship with the amount of debt used in a capital structure. Chang *et al.* (2009:22) also agreed that companies with high non-debt tax shields have relatively less debt in their capital structure. Deesomsak *et al.* (2004:394) added that companies can also use non-debt tax shields such as depreciation to reduce their effective corporate tax rates. They also stated that they have used the ratio of depreciation to total assets for the purpose of their study to measure non-debt tax shields. This is consistent with Chen (2004:1344) who used the same variables in ratios for their study. This is used because depreciation is viewed as the largest non-debt tax shield.

Loof (2004:462) reported a similar result, saying that using non-debt tax shields provide little or no incentive to change debt ratios. De Miguel and Pindado (2001:404) also found that non-debt tax shields have a negative relationship with debt ratios in capital structures.

4.2.4.7 Income variability

Income variability is a variable that is commonly used in the determination of a capital structure. Loof (2004:462) has stated that the variability of a company's income is expected to have a negative relationship with leverage. He explained that this is due to the fact that the more variable a company's operating income is, the greater the risk that the company will be unable to cover its payments and the higher the probability of bankruptcy.

4.2.4.8 Cash flow variability

Cash flow variability may be thought of as similar to income variability, but they do differ. Income includes cash payments and accruals of payments, while cash flow refers to the actual cash payments received. Bhaduri (2002:64) indicated that cash flow can be used as an indicator of a company's quality and creditworthiness. He also showed that cash flow in the short term has a negative relationship with the use of debt, while it is a positive indicator in the long term. De Miguel and Pindado (2001:92) found a negative relationship between a company's cash flow and the use of debt.

4.3 Cost of capital

As mentioned earlier, cost of capital has been defined by Correia *et al*. (2007:7-25) as the minimum rate that must be earned in order to satisfy the combined required rates of return of the

company's providers of capital. This is an important concept within the subject of Financial Management and is crucial to any company considering making capital investments abroad. Fukao (1995:47) pointed out that the cost of capital determines the discount factor, which is used to evaluate the cash flow from investment projects. The higher the cost of capital, the higher the discount rate and the lower the net present value of investment projects will be.

Fukao (1995:48) added that the cost of capital is determined simultaneously by the interaction between the financial decisions of the company and the market forces. He found that the increase in globalisation in financial markets tends to reduce international differences in financing cost of investments. It also tends to reduce the international differences in the cost of equity.

The weighted average cost of capital is the most common method of determining the cost of capital for a company. It is defined by Brigham and Daves (2004:1012) as the weighted average of the after tax cost components of debt, preferred stock and common equity. It is the proportion or the weight of the various sources of finance multiplied by the cost of the respective sources of financing. According to Bierman and Smidt (2007:206), many businesses nowadays utilise the weighted average cost of capital as the company's hurdle rate rather than using any other rate. The weighted average cost of capital, when used as a hurdle rate, is used for either accepting or rejecting an investment or project.

Two groups of factors affect the weighted average cost of capital of a company (Brigham & Daves, 2004:312). The first group comprises factors that the company cannot control. They concern the level of interest rates, as, when interest rates change, so does the cost of debt that the company would have to pay debt holders. Another is the market risk premium, as it is determined by the perceived risk on stocks, as well as the tax rate, as it is controlled by government and legislation.

The group of factors that the company can control are, firstly, the capital structure policy, as the various sources of capital have different costs, therefore changing the policy will change the weighted average cost of capital. Secondly, there is the dividend policy, as this will affect the level of funding available and can also affect the cost of capital. The last factor is the investment policy; this entails which projects the company accepts or rejects and will influence the amount of financing needed by the company. Abdullah (1987:401) pointed out that the cost of capital for

a multinational company may be far different from the cost of capital for a company operating in a single country only. The cost of capital may be adjusted for the foreign exchange rate risk, political risk, segmentation of capital markets, for the international diversification effect and for country-specific differences in the optimal structure. Political risk, foreign exchange rate risk and the differences in the optimal capital structures of countries are self explanatory and are common risks in doing any business abroad, while the other factors are less common. Segmented capital markets by definition are characterised by persistent differentials in the cost of raising funds in different countries which are not offset by the foreign exchange rate risk. The international diversification effect is that diversified companies may be able to reduce their cost of capital for two reasons. The first is that diversification could help to stabilise the overall cash flow and, secondly, international diversification should lower the systematic risk of the company, thus lowering its cost of equity and, ultimately, the cost of capital.

Careful estimation and calculation of the weighted average cost of capital is crucial for any company. This is due to the fact that there are many factors that affect the weighted average cost of capital and at the same time many factors or aspects that it could affect. Discussions of the various sources of capital are necessary as they collectively determine the weighted average cost of capital.

4.3.1 Components of the weighted average cost of capital

The components of the weighted average cost of capital consist of equity, debt and preference shares, which will be discussed in the following sections.

4.3.1.1 The cost of equity

Correia *et al*. (2007:7-6) defined shareholder equity as the sum of all items that provide the owners with a claim against the assets of the company. It includes the original amounts invested by the shareholders and the profit that has not been paid out as dividends, called the retained earnings, as well as other reserves. They added that the cost of equity is the cost of funds invested by the shareholders. Lawrenz (1976:54) defined the cost of equity as the theoretical minimum rate of return on the equity portion of the marginal additions to the capital structure which will leave the market price of the company's stock unchanged. Brigham and Daves (2004:502) added that fewer than two per cent of companies issue new common stock. They added that this is due to three reasons. The first is that flotation or issue cost can be quite high,

secondly that investors view stock issuance as a negative signal and, lastly, that an increase in supply will put downward pressure on the price once it has been announced.

Measurement of the cost of equity is difficult as a number of different theories or formulas could be applied when calculating the cost of equity. There are, however, two common ways of calculating the cost of equity, namely the Capital Asset Pricing Model (CAPM) and the Dividend Capitalization Model, which is also referred to as Gordon's Model, or the Dividend Yield and Growth Model, or also the discounted cash flow model (Abdullah, 1987:398; Correia *et al*., 2007:7-11; Eiteman, Stonehill & Moffet 1993:398). These are the most common methods used to calculate the cost of equity capital. The Gordon's Model utilises the growth rate in a company's earnings, the dividend payout and the market price of the share. Bierman and Smidt (2007:154) added that the theory behind this model is that the share price of the common stock can be determined by the present value of the dividends that investors expect to be paid by the company. The model also comes in various forms that are used in various situations and for various purposes.

The Capital Asset Pricing Model has a number of assumptions underlying the model. According to Correia *et al.* (2007:7-12), the Capital Asset Pricing Model states that the company's cost of equity is dependent on the risk-free rate, plus the market premium, multiplied by the company's beta. It is important also to know that a company's beta measures its systematic risk. Brigham and Daves (2004:309) added another method used to estimate the cost of equity. This method is the bond-yield-plus-risk-premium approach. This method is not discussed as it is not commonly used. The reason for this is that it is not very accurate.

Overall, each method may be correct at any given estimation. Correia and Cramer (2008:49) found that most companies in South Africa use the Capital Asset Pricing Model as their method to estimate the of cost of equity. The use of long bond plus risk premium, or as they call it, the risk-free plus risk premium, is not used at all in practice, while the discounted cash flow model is used almost never. Regardless of the method used, the cost of equity estimation is central to the calculation of the weighted average cost of capital. It is used in a number of instances and serves a number of purposes and a suitable estimate is crucial to the company.

4.3.1.2 The cost of debt

The cost of debt capital is different to the calculation of the cost of equity capital. There are a number of different sources of debt capital, as well as a number of different terms for utilisation of the debt. The different terms that can be specified for loans are the term of the payment structure, the type of interest charged, whether fixed or floating interest and the currency of the loan payments. These are examples of what can be altered in a loan agreement, and all of these can affect the overall cost of the debt. Brigham and Daves (2004:298) have indicated that all the terms of the loan will be determined by the specific purpose that the finance will be used for. Although there are a number of different sources of debt capital, the calculation of debt capital is fairly similar for all sources that can be utilised.

Correia *et al*. (2007:7-8) stated that determining the cost of debt capital for a company usually refers to interest-bearing loans. They added that loans can be divided into two categories, namely term loans at a negotiated rate and debentures at a coupon rate. The interest rate will be market related on the date of issue and the quoted rate will be related to the market rate currently being charged for similar loans.

Eiteman *et al.* (1993:399) described a different process for estimating the cost of debt. The normal procedure for a company requires a forecast of interest rates for the next few years; the proportions of various classes of debt the company expects to use; and the applicable corporate income tax rate. The different costs on an after tax basis of the debt components need to be calculated and the proportion in the debt structure must be taken into account. The result is the after-tax cost of debt used in the calculation of the weighted average cost of capital.

The cost of debt requires a different approach and method compared to the calculation of the cost of equity. The cost of debt calculation is more related to outside factors that the company cannot control, and cannot always be forecast accurately. Brigham and Daves (2004:298) added that the cost of debt is not forecast by using historical costs, but is estimated according to the costs that would be incurred if debt were to be issued today. Correia and Cramer (2008:48) found that 68% of the respondents in their study used the historical average interest rate after tax to forecast the interest rate. This is contradictory to financial theory, unless the current rate is similar to the historical rate.

4.3.1.3 Cost of preference shares

Preference shares represent the least common form of capital used by companies. Many sources covering the subject of Financial Management do not even discuss the use or cost of preference shares. Preference shares receive a dividend just as it is received by the ownership of common shares. The difference is that preference dividends are usually at a fixed rate and are expected to be paid, while ordinary dividends usually cannot be paid until the cumulative preference dividends are paid first (Correia *et al*., 2007:7-10). Furthermore, preference dividends are not tax deductible. The cost of preference shares is calculated by dividing the dividend by the net issuing price (after deducting flotation costs) (or the current market price) of a preference share (Brigham & Daves, 2004:299).

4.4 Operating leverage

Operating leverage is an important consideration amongst the other financial variables of a company. The operating leverage is important when discussing the cost of capital and the capital structure of a company. The operating leverage also has implications for a number of the other financial variables of the company. It plays a role in the cost determination and asset structure of a company, because operating leverage may be either capital or labour intensive. The proportion or degree of the capital and labour intensities require different amounts of capital. The higher capital requirement will need to be financed through internal or external financing sources. This is where operating leverage affects the cost of capital and capital structure of a company.

Gitman (2000:494) defined operating leverage as the potential use of fixed operating costs to magnify the positive (or negative) effect of changes in sales on the company's earnings before interest and taxes. McDaniel (1984:124) described operating leverage as the ratio of fixed cost to gross contribution margin. It is an old concept, the importance of which has long been recognised, and is closely related to the concept of break-even analysis.

Garrison and Noreen (1994:295) stated that a company with a high degree of operating leverage is a company with a high portion of fixed costs in relation to variable costs. The company's earnings will be very sensitive to a change in its sales. Brigham and Daves (2004:492) stated that, while holding everything constant, the higher a company's fixed cost, the greater its operating leverage. Higher fixed costs are associated with more automated, capital intensive

companies and industries. Companies that employ highly skilled employees who must be paid to be retained, even during recessions, as such also incur higher fixed costs.

Brigham and Daves (2004:994) have defined business risk as the inherent risk in the operation of the company, prior to the financing decision. Thus, business risk is the uncertainty inherent in future operating income or earnings before interest and taxes. Thus it can be deduced that business risk and operating leverage have a positive relationship with each other. According to Correia *et al*. (2007:3-3), business risk includes all the uncertainty that occurs from the industry within which the company operates. This is reflected in the variability of sales and cost structures. The variability in sales and the increase in business risk may ultimately affect the capital structure of the company and the cost of capital. This occurs because, at higher levels of risk, shareholders demand a higher premium for the financial risk that is placed on them. This may raise the cost of the overall rate of return they will demand on their equity invested with the company. The higher cost of equity may impact on the capital structure, as a company may change the capital structure in favour of less expensive forms of financing.

A company considering making capital investments abroad will find it extremely important to plan their degree of operating leverage before making a decision about their investments. The company would need to estimate and quantify their degree of operating leverage and determine what would be suitable for the market and industry which they are entering. Ramstetter (1999:194) studied Asian manufacturing firms and found that foreign multinational corporations tended to be relatively large and have *relatively high* average labour productivity, average capital intensity, skilled-labour intensity, research and development intensity and profit rates. It is for this reason that multinational companies considering investing abroad evaluate operating leverage. They have to consider the differences in/and characteristics of their labour and capital uses for the company, as well as their respective labour and capital intensities. An important factor to consider is the substitutability of capital for labour. Parkin (2008:392) explained this as ease with which a company can use capital instead of labour in production processes. Capital and labour intensity receive due attention in the following sections.

4.4.1 Capital intensity

Capital intensity is explained as the use of a high amount of capital relative to the use of labour. A company must decide whether to have higher capital or higher labour intensity. This will, of

course, not be so easily decided as a large number of factors need to be considered when making this decision. It is also important to study the prevailing capital intensity of the related industry as it will have an important effect on the company's operating leverage.

Williams and Scaperlanda (1995:41) stated that foreign-owned companies are presumed to be more capital intensive than solely domestic companies. This might not always be the case, but it is a common assumption. Zhu and Tan (2000:515) concluded that the general consensus is that a higher level of capital intensity will lead to a higher level of productivity as the workers will be equipped with better equipment. The capital intensity of a company, just like labour intensity, depends on a number of factors. The capital intensity will be influenced by the cost of capital of the company. When the company does not have the funding available, they will have to obtain external financing to meet their needs. Even if the company does have the funds, it will come at a cost to the company as such funds could be used for other purposes. This is especially important for companies with high capital intensities relative to labour intensity, due to the fact that equipment will substitute the use of labour. The capital intensity that will be used, usually involves technology that comes at a great cost, depending on the type of equipment to be used.

A change in capital intensity may affect the capital structure, and ultimately the cost of capital of a company. This will once again depend on the form of financing that the company decides to use. As discussed above, the various forms of available capital come at various costs and have different effects on the weighted average cost of capital. Bierman and Smidt (2007:315) mentioned that a company can lease the asset or equipment, instead of buying it. The option to lease will not affect the cost of capital or capital structure of the company. It is obvious that the other option of buying the assets will impact on the capital structure and the weighted average cost of capital.

4.4.2 Labour intensity

Parkin (2008:392) explains that a labour-intensive production process is one that uses a lot of labour and relatively little capital. A company once again has to decide what proportions of labour and capital intensity to use. The proportions will depend largely on the industry and types of production the company decides on. This is complicated in the domestic market, but becomes far more complicated when companies decide on entering foreign markets. The factors that affect the decision of labour intensity will be discussed below.

4.4.2.1 The cost of labour

The first factor that affects the labour intensity of a company is the cost of labour in the domestic and the foreign market. Tsai (1991:276) has stated that FDI is undertaken to take advantage of cheap labour costs in less developed countries. The wage differentials between the home and foreign country are of great importance. Anwar (2008:504) found that an increase in the short run of the wage rate will cause a decrease in the amount of FDI. This is consistent with Cushman (2001:183), who found that a rise in the foreign country wage level or a fall in the home country's wage level will discourage FDI, unless there is a strong capital-labour substitution effect. Bellak, Leibrecht and Riedl (2008:33) studied Central and Eastern European countries and found that high labour costs are a deterrent to FDI; they estimated that a one percentage point increase in the unit labour cost decreases FDI inflows by 2.7 percentage points. Furthermore, the government could enact a law to keep wages low, as this could be an incentive to attract FDI. However, companies that pay higher wages to their employees are likely to achieve a higher level of productivity (Zhu & Tan, 2000:520). Ramstetter (2004:881) has found that, for the duration of the study that was undertaken, multinational corporations paid significantly higher wages than local companies.

4.2.2.2 Availability of labour

The second factor affecting the labour intensity of a company is the availability of suitable labour, whether skilled or unskilled. The availability of skilled labour is especially important, although the full extent of its effect will differ according to the industry in which the company operates. Majocchi and Presutti (2009:83) have found results that indicate companies are attracted by a well-trained workforce with higher productivity, while Cooke (1997:13) previously concluded that US multinational companies are influenced by access to more highly skilled work forces and not by compensation of the labour force. This is consistent with Gao (2005:291), who found that a significant positive relationship exists between labour quality and the location of FDI in developed and developing countries. Developed countries tend to be more sensitive to labour quality than developing countries. Williams and Scaperlanda (1995:48) also reported that foreign direct investors are especially interested in more skilled workers, due to the strongly positive effect of labour quality on the inflow of FDI. Multinational corporations tend to require a higher educational level (Dupuy & De Grip, 2006:345). Countries interested in attracting FDI should therefore enhance the education and skill of workers (Cooke, 1997:15).

4.2.2.3. Labour productivity

Labour productivity helps to determine the level of labour intensity. This is due to the fact that capital intensive factors and processes are more efficient in some instances than labour intensity; in some instances the inverse is however true. Ramstetter (2004:881) has found that multinational corporations have significantly higher labour productivity than local plants in the Thai manufacturing sector. This is consistent with research by Ramstetter (1999:176), who found that multinational corporations have higher labour productivity in all countries within his sample, except for Malaysia. Labour productivity is crucial; if a company enters a market with low labour costs, and at the same time has low labour productivity, it may be of no benefit to the company. Among the explanatory notes they used in their study, Liu *et al*. (2001:435), added that human capital is the most important determinant of labour productivity. They have found that a one-percent increase in human capital leads to a 1.13% increase in labour productivity. They also found that labour productivity has a positive effect on FDI, and that FDI also has a positive effect on labour productivity. Zhu and Tan (2000:518) have added that labour productivity is sensitive to changes in the wage rate, as a one-percent increase in the average wage rate will increase labour productivity by 0.643% to 0.775%.

Capital and labour intensity have been shown to be important considerations for companies considering making capital investments abroad, as they affect a number of areas in a company. They will determine the cost structure of a company, which will determine the operating leverage and break-even point for the company. These decisions are of even greater importance in multinational corporations as they tend to have *relatively high* average labour productivity, average capital productivity, capital intensity, skilled labour intensity, research and development intensity, profit rates and trade propensities (Ramstetter, 1999:194). It is important to also consider labour and capital intensity as they can alter the capital structure and cost of capital of a company. These changes are more obvious with increases in capital intensity, than an increase in the labour intensities.

4.5 Financial leverage

Gitman (2000:138) defined financial leverage as the magnification of risk and return introduced through the use of fixed-cost financing such as debt and preference shares. It is clear that the greater use of fixed-cost financing, the higher the financial leverage, and the greater the expected

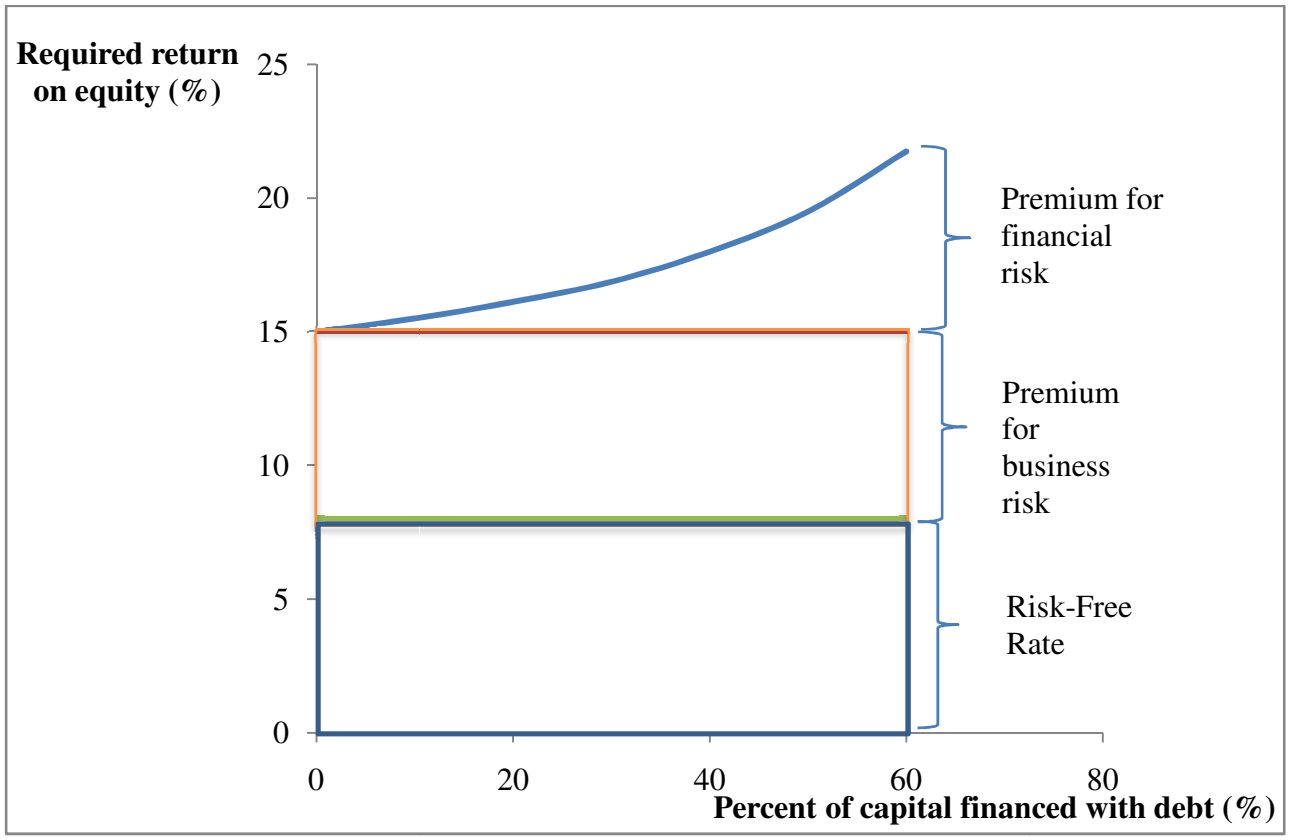
risk and return. Brigham and Daves (2004:999), on the other hand, defined financial leverage as the extent to which fixed-cost securities such as debt and preference shares are used in a company's capital structure. There is full agreement that the increase in the use of debt and preference shares increases financial leverage which may have a positive or negative effect. The effect is that the fixed cost of debt and preference shares magnifies the variability of operating cash flows. The common consideration in the various definitions of financial leverage is that it concerns debt and preference shares, and with the increased use thereof, financial leverage increases.

Financial leverage is mainly concerned with the use of debt, and less with preference shares. Financial leverage is closely related to the topic of financial risk, which is defined by Correia *et al*. (2007:3-6) as the result of the practice of financing part of the company's assets with interest-bearing debt, with a view to increase the ultimate return to the ordinary shareholders. Interest payments have to be met by the company regardless of the company's performance. Thus, a company that is liable for interest payments is exposed to a default risk, which a company with no debt does not have to face. It then is obvious that financial leverage arises with the use of debt, compared to a scenario where no debt and no financial leverage exist. Brigham and Daves (2004:496) added that financing with debt and obtaining a positive financial leverage, increases the common stockholders' expected rate of return on an investment, but debt also increases the common shareholders' risk. Prezas (1987:43) found that capital structure adjustments cause the degree of financial leverage to change, and that the increase in the use of debt could put the company in a different class of risk.

Financial leverage is an important consideration to the company as it has a number of implications that could follow if not planned for. A change in capital structure through the use of debt can have a serious effect on the income statement of the company. For example, if the company has low sales and high debt, it will still be required to meet the interest payments, which will, in turn, magnify the already very low or negative rates of return. The degree of leverage has to be decided as it affects the financial risk and therefore the total risk of the company. The increase in risk can also bring about a change in the credit rating of the company.

The following figure shows the required rate of return of equity at different levels of debt:

Figure 4.1 Required Rate of Return of Equity at Different Debt Levels



Source: Brigham & Daves, 2004:508.

The above graph has been adapted to show the relationship between the company's debt ratio and its required return on shareholders' equity. The graph illustrates that while the company has no financial risk and only business risk, shareholders are willing to accept a return that equals the risk-free rate plus a premium for the business risk. As the company increases its debt ratio, it simultaneously increases the return required by shareholders. This is due to a higher premium required by shareholders with the higher financial risk.

4.6 Total leverage

Total leverage is defined by Gitman (2000:500) as the potential use of fixed costs due to both operating and financial leverage to magnify the effect of changes in sales on the company's earnings per share. It can be viewed as the total impact of the fixed costs in the company's

operating and financing structure. There is not much of an explanation required for the degree of total leverage as the various components of it have already been dealt with. Furthermore, a numeric example will best relay the information to be presented as it provides a better explanation and also includes all the aspects that need to be illustrated.

The following example is adapted from Lambrechts, Reynders and Scheurkogel (1987:497):

Operating leverage = Percentage increase in earnings before tax ÷ percentage increase in sales

= 20.0 ÷ 16.67

=1,2

Financial leverage = Return on shareholders' equity ÷ return on assets

=55.0 ÷ 25.0

= 2,2

Total leverage factor = 1,2 × 2,2

= 2,64

The total leverage factor above implies that a 10% decrease or (increase) in the sales will cause a 26, 4% increase (or decrease) on the return on shareholders' equity. Total leverage may be negative if either financial or operating leverage are negative.

4.7 Conclusions

This chapter focuses on a number of implications that are crucial when considering making capital investments abroad. These are aspects that may not be overlooked as they are vital to a company. They need to be researched and carefully considered before making any decisions on making the capital investment. Most of these aspects are interrelated and affect each other in various ways.

The chapter commenced with a discussion of the capital structure of a company and its determinants. The discussion of the capital structure is not presented in isolation as there are a number of aspects that help to determine the capital structure. This led to the discussion of the

cost of capital, which is also determined by the capital structure, as it determines the proportions of the various forms of capital used for the calculation of the weighted average cost of capital.

Operating leverage and financial leverage also play a role in the determination of the cost structure of the company and the proportion of debt used by a company respectively. The capital and labour intensity of a company's operations will impact on the operating leverage of a company. The sections on leverage showed two main forms of risk found within a company, namely business and financial risk. Changes in the operating and financial leverages lead to changes in these two forms of risk, and ultimately, the cost of debt and equity. The discussion and inclusion of total leverage, as derived from operating and financial leverage, relayed their combined effect on the return on shareholder's equity.

Overall, this chapter has presented important implications for companies considering making capital investments abroad. Companies need to assess and consider the individual and combined effects of each factor on the company. In addition, they need to consider these factors in isolation in the home country, and once again jointly with the home and host country. Overlooking or disregarding these factors may have a very serious negative impact on the company.

CHAPTER 5

CASH FLOW, LIQUIDITY, SOLVENCY AND PROFITABILITY

5.1 Introduction

Cash flow, liquidity, solvency and profitability are considerations that are of great importance to all companies in the process of operating or considering making capital investments abroad. These four aspects are crucial to the success of a company. Their importance is also shown in the course of doing a financial analysis of any company.

The objective of the cash flow statement is to provide users of financial statements with information about the source and application of all financial means during the particular period (Lambrechts, 1990:62). This differs from accounting profit, because some of the income and expenses listed in the income statement are not received or paid in cash during the year (Brigham & Daves, 2004:197). This is due to the fact that many of these transactions are done on a credit basis. The cash flow of the company that will be discussed is displayed in the cash flow statement. A company may experience a large amount of sales and sales growth, but this is of no use to a company if it is unsuccessful in realising the cash inflow from its sales. This may have a negative effect on the liquidity and solvency requirements and abilities of the company.

Liquidity refers to the availability of cash to meet the company's short-term obligations. Solvency, on the other hand, refers to the ability of a company to meet its long-term obligations. Low or no cash flow may render a company unable to meet its obligations. Profitability, however, is also an important consideration for any business opportunity or venture, as profit is the main motive for any business expansion. A negative profitability (or losses) in a company may force the company into liquidation or to being sold by the owners.

These four concepts have great importance when considering making capital investments abroad. They are crucial to the functioning and success of a company, and as such may not be overlooked. Their relevance and impact will be discussed in the sections that follow.

5.2 Cash flow

Cash flow is different from sales or profit. Solomon and Pringle (1980:58) stated that profit is intended to measure the change in company value, while cash flow measures funds generated by the company's operations and is available for expenditure. Gallinger and Healey (1991:8) stated that profit is the amount by which revenue for a period exceeds the cost of the assets used to obtain the revenue. This relationship can be expressed with the use of the following simple equation: Profit = Sales for the period – costs incurred to obtain the revenue.

Profit may be thought of as the most important concept in business, but it is cash flow that plays the larger role. It is also stated that cash inflows and outflows need to be managed effectively, so that there are sufficient liquid assets to meet the demands of a company's creditors. Earning a good profit is not the same as earning a good cash flow and does not guarantee that cash will be available when needed. Furthermore, waiting too long to turn profit into cash reduces the value of the profit through the time value of money. Brigham and Houston (1998:39) added that cash flow and accounting profit differ, because some income and expenses listed in the income statement are not paid in cash during the year.

Brigham and Houston (1998:619) also stated that there are a number of reasons for a company for holding cash balances. The first reason stated is that cash is needed for transactions in normal business operations because payments are made in cash and receipts are deposited in the cash account. Secondly, it is needed to provide for the repayment of loans from other institutions. Two other reasons for the holding of cash by a company are also stated. The first reason is for precaution. This is due to the fact that a company's cash flow may be unpredictable and it is necessary to have cash in reserve for random, unforeseen fluctuations in the cash inflow and outflow. The second reason is for speculative reasons. This type of reserve is held for bargain purchases that may arise that the company wants to take advantage of. Ramirez and Tadesse (2009:2) indicated that capital market imperfections drive a company's cash holdings. This is due to the fact that, if capital markets were perfect, companies would need to only hold enough cash to cover normal operations.

The cash balances that are referred to in this chapter are recorded in the cash flow statement, as well as the balance sheet. Correia *et al*. (2007:5-4) stated that the cash flow statement is designed to show the cash generated from or utilised in three major areas; operating activities; investing

activities and financing activities. The relationship between cash flow and debt is one of the best indicators of the financial health of a company. The cash flow statement is limited to a summary of transactions within a period, disregarding events that occurred in prior periods and those that may occur in future periods (Gallinger & Healey, 1991:54). Thus it only reflects the operations of the period which it is reviewing. Sharma and Iselin (2003:1134) found in their study that information in the cash flow statement has greater information content than accrual information in the context of corporate liquidity and solvency. It was also indicated that the cash flow statement is a better provider of various types of information than that contained in accrual financial statements.

5.2.1 Cash flow and investment

A number of studies have investigated the relationship between a company's cash flow and its level of investment. Studies that explored the relationship are especially important to this study, as it has explored the factors that are involved in the decision making when capital investments abroad are considered. This section will concentrate on the results of the studies that are mentioned.

Minton and Schrand (1999:438) indicated that investment levels are sensitive to cash flow *volatility*, and that the degree of sensitivity is a function of the cash flow levels. The relationship between cash flow volatility and investment is a negative relationship. This relationship is made stronger when the level of cash flow volatility is increased. Carpenter and Guariglia (2008:1901) found that there is a positive relationship between cash flow and investment. They indicated that a 10% increase in the cash flow to capital ratio leads to a 1.62% increase in investment. Guariglia (2008:1802) supported the results presented by Carpenter and Guariglia (2008:1901) indicating that a 10% increase in cash flow in his study, led to a 1.21% increase in investment. Guariglia (2008:1802) also indicated that small and young companies have a higher sensitivity to investment and cash flows than larger and more established companies. This contradicts the findings of Kadapakkam, Kumar and Riddick (1998:316), that larger companies have higher sensitivities to cash flow and investment.

These results tend to show a strong relationship between cash flow and investment. This is important as companies that have higher cash flows tend to be those that will be considering

making capital investments abroad. The results are especially important for them, as a higher level of cash flow may be more volatile.

5.2.2 Cash flow ratios

Ratio analysis is an important part of any financial consideration as this is the method for the evaluation of a number of aspects of a company. Ratios are a common method of financial statement analysis and are used to make future predictions, thus making them useful to a functionary considering making capital investments abroad and assessing companies. Various parties use ratios in the evaluation of financial statement analysis. Ratios are also crucial for analysing the factors that will be discussed in the remainder of this chapter. Ratio analysis is not as simple as only calculating the ratios. They have to be compared to industry norms, previous company ratios and similar companies. This may, in some instances, be the complex part of ratio analysis, as the interpreter may have limited data for comparison. There also are a number of shortcomings when comparing a company to industry norms and similar companies. It is important to bear in mind that comparison between home and foreign country norms and averages are complex. Brigham and Houston (1998:88) stated that many companies undertake a technique called benchmarking. This involves comparing their ratios to a number of top companies within the industry. Lambrechts (1990:83) stated a list of factors that may influence the comparability of ratios. These factors include the fact that the nature of the products may differ; the nature of the product distribution and the market may differ; the composition of fixed assets may differ; and lastly, differences in the capital structure of companies may occur.

There are a number of cash flow ratios, but not all of them seem applicable to this study, therefore ratios that are most applicable and will provide the most valuable information will be provided. The ratios that follow have been adapted from Lambrechts (1990:99):

- Cash flow to turnover ratio = Net cash from activities of the enterprise ÷ turnover

This ratio probably is the most important ratio of all the cash flow ratios. It shows the ability of the company to generate cash flow from its turnover. This is important because a company might have a high level of sales, but it may all be on credit. Thus a company will experience low levels of cash flow, which may lead to financial problems. A higher ratio for the company may indicate a more positive outlook for the company.

- Working capital to cash from activities of the enterprise =

Change in working capital ÷ change in turnover

The rationale behind this ratio is that a change in working capital should lead to a realistic change in turnover. If this does not occur, an increase in working capital will not be justified.

- Cash flow for financing costs =

Net cash from activities of the enterprise less taxation ÷ {financing cost × (1-tax rate)}

The purpose of this ratio is to determine whether the company has the ability to meet its financing costs on an after tax base. This is important, as the financing costs or interest charged on loans is legally binding; if a company cannot meet its interest payments it could be forced company into liquidation.

The following has been adapted from Brigham and Daves (2004:205):

- Free cash flow (FCF)=

Net operating profit after-tax – net investments in operating capital

The purpose of this ratio is to determine the value of the company's operations. This value depends on the future value of the company's cash flows, defined as the net operating profit after-tax less the amount of net investments in working capital and fixed assets in order to sustain normal business operations. It thus shows the cash that is available for distribution to investors.

5.3 Liquidity

Liquidity is a concept that is closely related to and ties in well with the cash flow of a company. Whereas cash flow refers to the actual cash position of a company, liquidity is a much broader concept which emphasises the potential for generating cash flow over the short-term. Lambrechts (1990:113) explained liquidity to be the continuous ability of a company to make the necessary payments in the short-term that are required to continue its operations. Slater (1974:27) added that it involves a company's potential for generating cash, or its cash availability from sources such as sales, assets, leverage, acquisition, equity and investment. From the two descriptions it is obvious that the central concept in liquidity is the availability of cash flow within a company in the short term. A company may find it necessary to practice liquidity management to deal with

its liquidity needs. Liquidity management is the allocation of liquid resources over time for payment of obligations due and for various investments that management undertakes to maximise shareholders' wealth (Gallinger & Healey, 1991:3). Lambrechts (1990:113) added that a healthy liquidity requires striking a balance between incoming and outgoing cash flows in the short term.

A number of reasons have been proposed for why liquidity should be important to a company (Brigham & Daves, 2004:706; Correia *et al*.2007:12-15). These reasons are, firstly, that it can result in cost savings for a company, as illiquidity may mean having to pay a higher interest rate and lose discounts for timely payments on accounts payable. Secondly, the company will experience greater freedom in its operations. Thirdly, it may improve an outsider's view of the company's creditworthiness. Fourthly, it allows management to work better, without the worry of insufficient liquidity. Lastly, long-term liquidity problems may affect a company's solvency and ultimately result in bankruptcy. Solvency is a topic closely related to liquidity. It will be discussed in the next section.

A study by Goldstein and Razin (2006:288) found that investors who have higher liquidity needs will undertake foreign portfolio investment instead of foreign direct investment. It is because foreign portfolio investment has the ability to be sold prematurely without significantly lowering the price, while the opposite is true for foreign direct investment. This result shows that the level of liquidity needed by an investor can affect the investor's decision about the type of investment. Aguiar and Gopinath (2005:447) found that, during a financial crisis, companies with low liquidity are more likely to be involved in an acquisition than cash-rich companies. Kato (2006:1128), in a similar study, found that companies tend to become more liquidity-dependent during recessions, because the decrease in profitability raises the benefits of holding liquidity. It has also been said that larger companies with projects with higher net present values, tend to demand relatively less liquidity than smaller companies.

5.3.1 Liquidity ratios

They are two ratios that are often used for calculating the liquidity of a company. They are the current ratio and the quick or acid test ratio. Brigham and Houston (1998:71) stated that the role of liquidity ratios is to determine a company's liquidity position or whether it will be able to

meet its obligations over the twelve months to follow. The following ratios have been adapted from Lambrechts (1990:96):

- Current ratio = Current assets ÷ current liabilities

The current ratio provides an indicator of the extent to which the claims of short-term creditors are covered by assets that are expected to be converted to cash fairly quickly (Brigham & Houston, 1998:71). Correia *et al*. (2007:5-13) stated that current assets normally include cash, accounts receivable and inventory, while current liabilities consists of accounts payable and accruals. Businesses, banks, and other short-term lenders believe that their chances of being paid may be high when the current ratio is in the vicinity of two (Soldofsky & Olive, 1974:352). The higher the current ratio relative to the industry average, the more likely the account is to be paid on time. The comparison between home and foreign country norms and averages may also play a large role in evaluation of the ratios. Lambrechts (1990:115) added that even though a high ratio is obtained, further analysis is required to draw meaningful conclusions. This is due to the fact that a number of other factors need to be taken into account. These factors include the quality of the current assets, seasonal influences and the composition of each specific item that make up current assets and liabilities. The acid test ratio is as follows:

- Acid test ratio = (Current assets – inventory – prepayments) ÷ current liabilities

Inventories typically are the least liquid of a company's current assets, hence they are the assets on which losses are most likely to occur in the event of liquidation (Brigham & Houston, 1998:72). Therefore, a measure of the company's ability to pay off short-term obligations without relying on the sale of inventories is important. The acid test ratio has the same factors as the current ratio that need to be considered when using it. Soldofsky and Olive (1974:355) stated that the acid test ratio is a short-term solvency ratio. This is due to the fact that, if a company was liquidated and its accounts receivable collected, this ratio would reflect the extent to which current liabilities could be paid.

5.4 Solvency

Solvency is a dynamic task and is a function of the allocation of resources; and the company's creditworthiness and debt paying ability (Gallinger & Healey, 1991:6). These authors also stated that there are two meanings to solvency. The first is actual solvency, which is a state in which a

company's asset values exceed the value of its debt. The second, technical solvency, applies when a company pays obligations as they fall due. Solvency is explained by Lambrechts (1990:119) as the ability of a company to settle all its debts, even when the company is ceasing operations and selling its assets. Thus it is concerned with the extent to which a company's assets cover its liabilities.

Solvency is as extensively researched as the other financial aspects discussed in this chapter. Solvency may not be overlooked, as it has a number of implications for a company. This may be especially important for a company considering making capital investments abroad. Banks, suppliers and other possible creditors need a certain amount of surety, or a safety margin, before allowing a company to utilise credit. Solvency is also important because it allows a company to utilise debt capital without sacrificing the control of the company by issuing ordinary shares. Creditors require a good level of solvency as a safety margin, so that the debt capital does not carry the risk of the company (Lambrechts, 1990:119). The comparison between home and foreign country norms and averages may also play a large role. This is due to the fact that, if a foreign country has norms and averages that differ greatly from the home country, the foreign company may have to adjust its balance sheet and asset composition. Gallinger and Healey (1991:7) stated that liquidity management is important if insolvency risk is to be contained. There are two solvency ratios which are important for this research and which are discussed in the following section.

5.4.1 Solvency ratios

The following ratios have been adapted from Lambrechts (1990:97):

- Solvency ratio = Total assets ÷ total debt
- Debt ratio = Debt ÷ total capital

The solvency ratios are concerned with the evaluation of the extent to which the company's assets cover its liabilities. Soldofsky and Olive (1974:364) stated that creditors view a high debt ratio with uneasiness, because it means that the creditor may have a larger investment in the company than the owner does. It is also said that lenders are cautious about companies which have debt ratios that are above the industry average. It is important to note that the above ratios are the inverse of each other.

5.5 Profitability

Profitability may be the most crucial of all the ratios discussed in this chapter. Profitability is used as the ultimate test of management's effectiveness in directing the company and ensuring that its liquidity needs are satisfied (Gallinger & Olive, 1991:81). Brigham and Houston (1998:79) stated that profitability ratios show the combined effects of liquidity, asset management and debt on operating results. Lambrechts (1990:20) added that profitability is more significant than the figure of profit earned, as the relationship between net profit as an absolute amount earned during the period and the capital used to earn the profit is important. It is also stated that absolute figures for profit are meaningless for making decisions on operating activities and are hardly used for those purposes. Profitability is useful as it allows owners and investors in a company a medium for direct comparison of their returns with other investment possibilities. It is also useful in allowing direct comparison between the expected profitability of an investment and the cost of capital.

A number of studies have been undertaken regarding profitability and a number of factors that it may be related to. Sakakibara and Yamawaki (2000:6) found that subsidiary and parent-related factors, as well as industry-specific and country-specific factors, play an important role in the profitability of foreign subsidiaries. Factors that they have found beneficial include the economic and institutional factors specific to the host region. Size, implied market power and efficiency of the enterprise hold a positive relationship with the profitability thereof. Qian (2002:625) found evidence that product diversification and multinationality have a positive relationship with profitability. The results have also suggested that even small young companies may benefit from foreign activity such as sales expansion and extension of their product life cycles. Anastassopoulos (2004:54) found that multinationality has a positive relationship with profitability. Zou and Simpson (2008:506) found that industries with high profitability are targets for a foreign takeover. This shows that profitability is an important consideration for individuals or companies considering investments abroad.

5.5.1 Profitability ratios

Soldofsky and Olive (1974:204) stated that there are a number of different ways in which profitability can be viewed, as there are a number of ratios with different definitions of the variables that are available. Correia *et al*. (2007:5-18) stated that the most appropriate definition

of profit should be identified before calculating the profitability ratios. The crucial part is whether profit will be before or after tax. For the purposes of this study, profit before tax will be utilised. This is because a change in the tax rate will affect the ratios, while the profitability of an enterprise may remain constant.

The following ratios have been adapted from Lambrechts (1990:95):

- Return on assets =

(Profit before interest and tax ÷ net turnover) × (net turnover ÷ average total assets)

The return on assets measures the profitability of the company as a whole in relation to the total assets employed (Correia *et al*., 2007:5-18). Lambrechts (1990:100) stated that this ratio gives insight into the profit before interest and taxation that remains from each unit of turnover, and also the turnover ratio that is being realised by the total assets.

- Return on shareholders' equity =

(Operating profit + investment income – interest paid) ÷ average shareholders' equity

The purpose of this ratio is to determine to what extent the management of the company succeeded in realising a satisfactory return on the equity invested by shareholders. This ratio should be especially important to potential investors, as a higher return has a higher level of appeal to investors. When the return on shareholders' equity is higher than the return on assets, it is an indication that a positive financial leverage prevails due to the employment of debt capital.

- Return on ordinary shareholders' equity =

[(Operating profit + investment income – interest paid) – {preference dividends ÷ (1-tax rate)}]

÷ average shareholders' equity

This is the rate of return that ordinary shareholders will receive on their investments. It has an adjustment for preference dividends which are paid after tax, thus it needs to be adjusted to a before tax amount. Ordinary shareholders' equity consists of ordinary share capital, reserves and retained income. All of this is attributable to the ordinary shareholders. When the return on ordinary shareholders' equity exceeds the return on the shareholders' equity, a positive financial

leverage is present, which is a result of employing preference share capital. It is important that these ratios be compared with the home and foreign currency averages and norms so that a proper analysis is obtained.

5.6 Conclusions

This chapter has dealt with the various financial aspects and ratios that are applicable, and may be useful to a company. The relevant ratios have been presented, along with an explanation of the various factors and rationale for using the ratios. While there are a number of other ratios that are available, these mentioned should be useful for a company considering making capital investments abroad.

It can be concluded that the cash flow of a company is crucial, as a company with profits and no cash flow may encounter problems. Cash flow is necessary for a number of applications within a company and the cash flow statement is useful as it shows the movement of the company's cash flow during a period. It also provides the data that are to be used in the calculation of the cash flow ratios. Cash flow is also necessary to maintain a healthy level of liquidity.

Liquidity is constantly needed for the healthy functioning of a company. Liquidity management is necessary to satisfy the liquidity needs of a company. The liquidity levels can be evaluated using the liquidity ratios presented in this chapter. They may be easy to calculate, but their importance should not be underestimated.

Solvency is similar to the concept of liquidity, although it is taken over a longer period of time while liquidity concerns the short-term needs of a company. Solvency does not only deal with the cash needs of a company, but also with the prospective amount that could be recouped by the debt holders in the event that the company needs to be liquidated.

Profitability ratios and analysis will ensure that the company will be steered clear of liquidation as it measures a company's financial performance. This may also be one of the most important ratios available as profitability is the main motive for any business in making capital investments abroad. Careful attention should be paid to the way in which it is defined, as it may have a serious effect on a company.

Utilisation of the factors presented in this chapter has a number of potential applications. It can help potential investors analyse and evaluate a company before investing abroad, or it can help evaluate capital investments that are already in operation in foreign countries. The ratios may also be useful when analysing the financial position of companies in general.

CHAPTER 6

SENSITIVITY ANALYSIS

6.1 Introduction

This chapter focuses on the sensitivity analysis which will be performed as part of the empirical study. Investopedia (2009) defines a sensitivity analysis as a technique used to determine how different values of an independent variable will impact a dependent variable under a given set of assumptions. Brigham and Daves (2004:1009), however, stated that it indicates exactly how much net present value will change in response to a given change in an input variable, other things being constant. They stated further that a sensitivity analysis is sometimes referred to as a "what if" analysis. The "what if" analysis in this case looked at the effect that the selected variables have on the results of the dependent variable. The basic premise is that it is an analysis done to find the results of changes in the inputs or variables in an equation, calculation, forecast or analysis.

In this study, the companies that were selected, were the largest companies as listed in the Financial Mail (2009) Top Companies of 2009 issue. They were ranked according to turnover, and the largest 50 were selected to be used. There were a number of other factors and statistics concerning the various companies that differed. Examples of these factors are the size of the enterprise, the experience of the company making capital investments abroad, as well as the extent and lifespan of the capital investments. The sensitivity analysis was used to scale the various differences between the companies. This was due to the fact that a company with, for example, a higher turnover or asset base would find it easier to undertake capital investment than a company with a smaller asset base or turnover. The sensitivity analysis is a necessary part of this study as using different companies could affect the outcome and results of the study. The sensitivity analysis is aimed at rectifying and scaling any additional effects that some companies may have experienced.

6.2 Sensitivity analysis

The characteristics and statistics of the companies used in the study naturally varied. Some companies had a larger asset base, higher turnover, more available resources or a higher level of capital intensity that could give it an advantage or make it more likely to invest capital abroad. The sensitivity analysis helped to scale and counteract the advantages that certain companies had, which could, affect the outcome of the study. This was done by applying the values of the various factors used in the sensitivity analysis, such as number of employees, total assets of the company, experience in years with doing capital investments abroad or relevant capital and labour intensities of the companies. Information needed to calculate these factors of the companies should be available as all respondents are large public companies. Once the values of those factors for each respective company are obtained, it will be compared.

6.3 Factors that were considered for inclusion in the sensitivity analysis

There were a number of factors that could be included and used, but the factors discussed in this section were the most applicable. They were factors that could have a bearing on the end result. The effects and possible reasons for including the factors in the sensitivity analysis are discussed in the following sections.

6.3.1 Size of the enterprise

This variable or factor has been shown to have great importance in studies that concentrated on companies undertaking capital investment abroad. Most studies that considered the factors of concern to companies undertaking FDI have used this as a variable. This variable is important, as the ability of large, medium and small companies may differ greatly from each other when making capital investments abroad. Overseas investment is often undertaken by large companies since they have a greater ability to bear the risk and uncertainty associated with foreign operations (Pradhan, 2004:623). A larger company size implies greater availability of financial and managerial resources, which, in turn, makes it easier to establish full-ownership subsidiaries (Tallman & Fladmoe-Lindquist, 2002:126). Blomstrom and Lipey (1991:106) have added that company size is the major determinant of the probability that a company will become a foreign direct investor. The studies that have included company size as a factor have found a number of important results which are discussed in the following paragraph.

The role of company size seems to be fairly consistent as presented in the available literature. Larger companies have been shown to make more investments than smaller companies, but they are not more likely to become multinational companies (Raff & Ryan, 2008:22). Quer and Claver (2007:26) found in their study that company size is positively associated with the likelihood that a full-ownership FDI will be established. Larger companies have a greater ability to absorb losses than smaller companies; they tend to have more financial assets to invest overseas, and therefore are less sensitive to uncertainty effects (Chandprapalert, 2000:85). This is consistent with research by Trevino and Grosse (2002:447) who found that larger company size correlates strongly with greater FDI into the United States of America. There is even a study by Bronzini (2007:972) that has discovered that company size within the host province plays a role in FDI. He has found that small companies in host country provinces discourage foreign investors, which he stated could be due to the fact that they could be viewed as less profitable.

There seemed to be a general trend, according to literature discussed, that larger companies tend to be more likely to undertake FDI. This has been shown in a number of studies. Thus it seemed important to include this variable in the study as a part of the sensitivity analysis. It was also a variable that could reveal a large amount of variability between the responding companies, which may seem unusual in this study as the companies that were investigated were the largest companies in South Africa. There are a number of ways in which size of the company can be determined and the various factors that can be used as a proxy to measure company size can bring about varying results. It is from this perspective that a discussion of the various manners in which company size can be measured is important. The next section will illustrate how the measurement variables may be used.

6.3.1.1 Turnover of the company

Turnover, or sales, as it is commonly known, is one of the variables used as a measure of the size of a company. The exact definition however differs from study to study as researchers may find different definitions suitable for their respective studies. Studies such as that by Galan and Gonzalez-Benito (2006:178), Pennings and Sleuwaegen (2000:182) and Trevino and Daniels (1995:178) used total sales as a measure of the size of the companies in their studies. There are small variations, such as in Pennings and Sleuwaegen (2000) who used the logarithm of sales as their variable, but small differences like these have no bearing, although they need to be noted.

Other research by Trevino and Grosse (2002:438) used the total global sales of a company as the measure of company size, but this may not be a true reflection of the real size of the company in the home country.

Sales were especially important for the current study as the companies that were contacted were selected according to their respective turnovers. Turnover seemed to be an appropriate variable to use as sales tend to increase with company size. There may be problems with using sales as being representative of company size, as there may be instances where companies have high sales but low asset values, e.g. a company with online business activities. There may be other problems as well, such as the exchange rate consideration which may cause discrepancies between countries to the exact recorded amount of sales that has occurred. The turnover of the company, however, had to be one of the variables used in the sensitivity analysis.

6.3.1.2 Total number of employees

The total number of employees is another very common factor used in various studies to measure the size of a company. Reports by Bronzini (2007:971), Mani, Antia and Rindfleisch (2007:860), Mata and Portugal (2002:333), Mutinelli and Piscitello (1998a:498) and Mutinelli and Piscitello (1998b:48) are examples of studies that have employed the number of employees of a company as a measure of the company's size. This information was accepted for the studies mentioned above, but this study is careful to use this factor as a representation of company size, because companies with a given number of employees may differ in other respects. Two companies may both have 100 employees while one company has double the asset value and turnover of the other company. This consideration is especially important when companies employ different capital and labour intensities. This variable could thus produce varying results for companies that are similar in a number of other respects.

6.3.1.3 Total assets of the company

As a measure of company size, this factor has been used least in the literature discussed. There are a number of different ways in which this can be used as there are a number of different ways in which assets can be defined. Total assets was used by Raff and Ryan (2008:10) and Ruiz-Moreno, Mas-Ruiz and Nicolau-Gonzalbez (2007:799). Information on total assets is freely available from the published annual reports of all large companies. Other ways of using this

include net asset values; values that may differ because of different accounting standards. In this study the combination of asset value per employee was used, as the next section indicates.

6.3.2 Labour and capital intensities

This may not have been an obvious choice for inclusion in the sensitivity analysis for this study, but it was seen as possibly having a significant bearing on the results of the study. Labour and capital intensities have already been discussed in this study. The capital and labour intensity forms an important part of a number of other factors and areas within a business. It may affect the cost of capital, capital structure and the cost structure of a company. It was important that the differences that could exist between companies be scaled to provide a better representation of the results. The relevant intensities also differ between industries and companies. Capital and labour intensities may also be a source of an advantage that a company has over its competitors. Ahiakpor (1986:159) researched the capital intensity of foreign and local companies to determine whether the foreign companies are more capital intensive than domestic companies. He came to an important conclusion in this study, namely that the capital intensity of a company is influenced by its cost structure and not its nationality. Love and Lage-Hidalgo (1999:84) stated that the capital intensity of a company is an indicator of the knowledge embodied in a company's technology. Companies which operate in sectors that exhibit a high degree of capital intensity may experience the greatest flows of FDI. A company may use capital intensities or technology to try to achieve economies of scale by using specific equipment in such a way that it cannot be matched by its competitors. Capital intensity may represent the opportunities and capabilities that will make a company more likely to invest capital abroad. This may give some companies big advantages over other companies. Love and Lage-Hidalgo (1999:88) stated clearly that companies that are affiliates of large multinational companies have higher capital intensities than other companies.

Labour intensity is a topic that is discussed often when capital intensities are discussed. Labour intensity is another area in which some companies may possess advantages over others. This is especially true concerning variations across industries. The labour intensity of a company may also differ according to the geographic region within which the company operates, because labour market conditions may vary considerably between countries. Hsu and Chen (2000:281) found that a small or medium-sized enterprise's FDI enhances its labour productivity. An in-

depth discussion of this is not necessary as a similar principle applies when discussing capital intensity. This is true due to the fact that these two factors complement each other. This study applied a combination of asset value per employee as a proxy of the capital-labour intensity of a company.

6.3.3 The company's experience in making capital investments abroad

The experience of the company making capital investments abroad has been included in nearly every study that has been consulted. This is not surprising as the experience of a company effects its decision to undertake further investments. This is due to the fact that experience helps companies build competencies and advantages over other companies. These advantages are the factors that may make some companies more profitable than others. Al-Khalifa (2005:5) stated that the risks of operating abroad are reduced through experience.

Martin and Salomon (2003:306) found that experience with prior foreign transfers promotes foreign direct investment. This is consistent with results obtained by Ruiz-Moreno, Mas-Ruiz and Nicolau-Gonzalbez (2007:803), who found that international experience is an important determinant of the first stage of the ownership decision in FDI. It is therefore safe to conclude that companies that have more experience have a greater probability of undertaking FDI abroad and at the same time are more likely to succeed. The difference in survival rates is consistent with the arguments that companies with prior experience in the host country have advantages regarding information that help to make their attempts at entry more likely to succeed than entries by companies with no prior host country presence (Shaver, Mitchell & Yeung, 1997:818).

Experience has been shown to play a major role in the decision to undertake foreign investment abroad. This shows that some companies may have advantages over others when investing abroad. The sensitivity analysis therefore has to consider the experience of the company making capital investments abroad as expressed by the number of years for which a company had been involved in such activities.

6.3.4 The life span and extent of the capital investment abroad

The use of life span and extent of the capital investments abroad are factors that have been reported far less than any other factor in the sources consulted. This, however, remains an important aspect that has to be considered by a company, as life span and extent of the capital

investments abroad could differ greatly. It could range from a short-term acquisition, to the establishment of a long-term subsidiary in another country, with either full or partial ownership. This factor needs be carefully assessed as it needs to be decided within the resources, expertise and skills that the investing company possesses. Most capital investment projects are expected to be of at least a medium- to long-term nature, due to the large amount of capital required to be invested.

6.3.4.1 The duration of the capital investment abroad

The duration of a project or various projects could differ greatly. Companies may acquire the capital investment for a medium length period for the purposes of resale and obtaining a capital gain. The common goal in making a capital investment abroad, however, is to acquire a lasting management interest in a company. This is usually done to gain an advantage from operating in the foreign country. The motivation for companies undertaking FDI to get advantages in foreign markets ranges from access to cheap resources, tapping into a new market, gaining market share, cost advantages and also tapping into a large supply of labour that they find necessary in their operations. These are all aspects that may affect the company's planned duration of the project. The duration of the project may also have certain advantages and disadvantages. A longer-term project allows a company more time to recoup the original investment and also successfully realise a return. A shorter duration, however, allows the choice to exit from a project that may not be experiencing strong financial and operating performance. The average duration of capital investment abroad was part of the sensitivity analysis of the study.

6.3.4.2 The extent of the capital investment abroad

The extent of the capital investment abroad is a topic that has been researched to a considerable extent. The extent of the capital investment abroad compared to capital investments by the home company in the home country should also be taken into account when doing a sensitivity analysis on this topic. It is expected that when the percentage of the capital investment abroad increases, the importance of successful investments in the foreign country will also increase.

6.4 Conclusions

A sensitivity analysis is not the starting point of a study such as this. This is due to the fact that there are other aspects which need attention before a sensitivity analysis can be done. The

sensitivity analysis for this study helped to show how the results change in respect of the companies.

The factors discussed in this chapter are those that are important when considering capital investments abroad. The list of factors used is not the only factors that could be used. Those used, were the most appropriate factors for the purpose of this study. The factors that were used in the sensitivity analysis also needed to be quantifiable in numerical terms. This was the reason why many possible factors were excluded.

CHAPTER 7

RESEARCH METHODOLOGY

7.1 Introduction

The research methodology of this research was introduced in the first chapter of the study. This, however, was a brief discussion of the planned methods to be used to obtain the data and the primary research that would follow. An in-depth discussion of the various methods used to obtain the data will be discussed in the next section of the study in which the population, research sample, research design, research process, data collection and limitations of the research will receive special attention.

7.2 Population

The term population, when used in the context of research, refers to the group of people, items or units under investigation (Coldwell & Herbst, 2004:73). The research universe for the purposes of this study was obtained from the Financial Mail's 2008 Top Companies issue (Financial Mail, 2008:29). The universe consisted of the top 200 companies listed in that particular issue of the magazine. The companies could be ranked according to various criteria. However, it was decided that choosing the ranking of companies according to turnover was the most appropriate form of ranking for the current study as it indicated the extent of the business activities. The sample and way it was chosen will be discussed in the next section.

7.3 Research sample

The 2008 Top Companies issue of the Financial Mail provided the ranking of the companies to be used as the research universe from which the research sample would be chosen. Although the issue revolved around the top 200 companies in South Africa, it was decided that the top 50 companies would form the research sample, as the target was set at obtaining the data of at least 30 companies. It was expected that not all companies contacted would be interested and willing to participate in the research. This is common for research of this kind, as many companies do not derive any benefit from such research and decline requests for various reasons. A contingency plan was decided upon should fewer than 30 responses be received. This involved

simply contacting the next companies in the ranking until 30 responses had been obtained. This would ensure that the minimum number of responses would be reached. This process would have lengthened the time period needed to carry out the research, but it was considered necessary.

Using the top 50 companies as the research sample was important as there were a number of benefits in doing so. It was evident that they were the most likely to undertake capital investments in countries other than South Africa due to the fact that they have extremely large asset bases, large borrowing capacity and are frequently associated with large groups of companies. Many of these companies also had a large number of existing investments abroad or were planning to make capital investments abroad. The most important factor, however, was that they had the resources available to meet the enormous costs that they would be faced with upon entering the foreign market. They would also have the level of expertise coupled with the correct skilled human capital to plan and facilitate a move into foreign markets. It was also obvious that these companies were mature and more stable companies that would be able to handle the uncertainties faced in the foreign market. These companies normally displayed these characteristics and qualities associated with them in their home markets, where they were considered as the business leaders. Lastly, these large companies are usually listed public companies. This makes the role of searching for data on the company much easier, as such data are freely available, to a large extent.

A number of potential problems that could be encountered when choosing the top 50 companies in South Africa were expected. The first and possibly the most obvious was that a company might be unwilling to participate in the research. This could be due to a wide range of reasons such as being too busy, that it was against the company's privacy policy, and that they did not feel that they were the appropriate company to participate. Other possible problems with having them as the sample for a research study were also foreseen. These included the fact that there are a number of positions within a corporate structure and department heads that are employed by these companies, therefore choosing the correct person could have proved to be a challenge. The key aspect to choosing the correct person is that they should be involved with making decisions for the company on a strategic level concerning capital investments abroad and must have a strong influence on the financial decision-making. This was expected to present some difficulty, because the higher up the corporate ladder the chosen representative would be, the more difficult

it would be to secure an appointment. Another problem that could have been encountered with the possible participants was that some high-level executives of international subsidiaries move between locations and are sometimes based in foreign countries. These companies may also be part of large global corporations, and in some of these cases the local subsidiaries do not do any investing abroad as it is done by the parent company on a global scale.

7.4 Research design

A research design focuses on the research method, the development of the questionnaire and, lastly, the various sections of the questionnaire.

7.4.1 Research method

The research method chosen for the study took the form of personal interviews with chosen representatives from the selected companies in the research sample. There are, of course, a number of other ways that could have been chosen, such as simply posting the questionnaires to the various companies and following up afterwards. The types of questionnaire that could be used for these two types of research methods could be identical; the differences lie in the benefits and costs involved in using either of them. One key difference that should be noted with regard to using the personal interview over against posting a questionnaire, is that the type of questionnaire used with the personal interview is called an '*aide-memoire*'. The details of the questionnaire and method used will be discussed in the sections that follow.

It is important to understand the reasoning for the personal interviews being chosen, despite the costs it would incur. The problem with choosing the top 50 companies was that their top management were all situated at their respective head offices, which were scattered around the country. This would make accessing these companies a daunting task, as it would mean travelling around the country. Thirty-seven of the top companies were based in and around Johannesburg, ten were in Cape Town and vicinity, and the rest were scattered around the country. It should also be noted that, with some of the top companies available in and around Johannesburg and Cape Town, one company occupied two positions in the rankings. This was because the first was the company itself, and the other was the holding company whose purpose was to control the majority ownership of the actual operating company. Thus the number of companies available was further reduced, from 47 to 46. It was decided that companies based in and around Cape Town and Johannesburg would be targeted. Narrowing down the companies to

those two geographic locations would limit the travelling to Cape Town and Johannesburg. This would cut down costs and still provide 46 companies that were available to attain the targeted 30 responses needed. This would reduce the number of available companies according to the contingency plan, but cut out travelling to other destinations such as Durban for a few companies. With four companies excluded from the research sample of 50, the next four companies in the ranking could have been selected to be used. This option was decided against due to the confidence felt in the ability to obtain the necessary responses from the companies already in the sample.

The next problem would be contacting the chosen representatives, as the appropriate representatives of the respective companies were their chief *financial* officers (CFO) and financial directors. At these levels of management the individuals are not readily accessible and arranging to meet them was expected to be an uphill battle that could span a few months. The plan was to address an explanatory letter to the postal addresses of the relevant companies, including an introduction to the study, stating by whom it would be carried out, what would be done and the information needed from the companies. A copy of the letter is provided in Appendix A. Another document was attached, which requested that companies complete the document and indicate the nominated representative to be contacted along with their contact details. A self-addressed and stamped envelope was provided. It was eventually decided to address the explanatory letter to the chief *executive* officer of each of the respective companies requesting an appointment with the chief *financial* officer or an appropriate representative of the company. The rationale behind this was that the chief *financial* officer would be most knowledgeable concerning the correct person for fulfilling the request that was put forward.

It may seem that the drawbacks or negative aspects of choosing personal interviews, as discussed above, may have quite a negative effect. This is not the case as the benefits associated with carrying out personal interviews are far greater than the drawbacks. The main benefit associated with carrying out personal interviews lies in the amount of feedback that can be obtained. With a personal interview all the senses may be used to get a complete picture of the reaction of the respondent to the questions being asked. Respondents are also given the time and opportunity to provide additional feedback that they may feel appropriate and applicable, which, as will be shown, provided a great deal of insight in this instance. When individuals are asked to complete

a questionnaire, they commonly tend to stick to the format of the questionnaire and the space provided for answering the questions. In this instance the questions are answered only and explanations are not allowed. The additional explanations helped to paint a clearer and more complete picture of what respondents were trying to say, in addition to other aspects that the questionnaire might not have required. The risk associated with making use of a questionnaire only is that there are always suggestions that may improve the results obtained through the questionnaire but they may not be made available. Lastly, when a questionnaire is mailed, there may be instances of respondents giving answers that do not truly depict their views, as they may be tempted to fill in the questionnaire with little effort in an attempt to get it done quickly. With the use of an *aide memoire,* the interviewer goes through the questionnaire with the respondent, giving the respondent the opportunity to answer the questions on the questionnaire and also giving the respondent time to process the answer properly, with enough time allowed for an appropriate response.

7.4.2 Development of the questionnaire

An empirical opinion survey was used in the course of the study. The questionnaire was used as an *aide memoire* during interviews with representatives from the respective companies, to explore their opinions, perceptions and feelings concerning the questions being asked. An *aide memoire* is used to assist in the interview process, with the interviewee and interviewer each having a copy before them. This guides and directs the process as both parties have all information available and some individuals may also find it preferable over having to pay attention to the interviewer all the time. This also gives both the opportunity to add their own input where they may find it applicable.

The questionnaire itself was drawn up from the secondary sources consulted during the writing of the literature review. Secondary sources are important as they facilitate the process of fully understanding the factors encountered while considering making capital investment abroad. These factors will not be found anywhere other than in a comprehensive literature study, or by being exposed directly to the factors being examined. These factors help to paint a full picture and also provide the framework for what should be included and covered in the questionnaire. Thus the questionnaire itself, although original, has been drawn up from collected secondary literature. Once drawn up, the questionnaire had to be tested to ensure its reliability and effects.

A mock interview was arranged with a representative from a prominent company in Stellenbosch that was not part of the research sample. The mock interview proved helpful as an outsider's opinion often differs from those who design the questionnaire. It also provided feedback regarding possible changes to the questionnaire.

The questionnaire was divided into five sections that dealt with various aspects that need consideration when planning to make capital investments abroad. The first section asked for the respondent's relevant details, such as contact information and job title. The second section contained questions on the respondents' perception of the importance of a number of factors when in the process of considering the investment. The third section asked respondents to indicate the five most important problem areas they have encountered and it also requested them to mention possible solutions to the problems. The next section contained questions on how often they make adjustments to a number of factors that were regarded as common occurrences when making capital investments abroad. The fifth and final section focused on the company's experience of making capital investments abroad and other key figures that would be crucial to the sensitivity analysis. A copy of the questionnaire is provided in Appendix B to this study. A discussion of the various sections mentioned above will be provided in the discussion to follow. Section one of the questionnaires will not be discussed as it involved only the details of the respondents.

7.4.2.1 Section 2: The perceived importance of the determining factors in the process of making capital investments abroad

This section made up a large part of the questionnaire itself, as it consisted of 31 aspects, which were placed into five groups of varying sizes. The questions were grouped according to various topics, or groups of similar aspects, which the company would be exposed to while making capital investments abroad. The sections concerned tax, interest rate, foreign exchange rate and inflation rate considerations, as well as the cost of capital, capital structure and financial leverage considerations, labour and capital intensities, and, lastly, financial ratio analysis. It can be deduced from the sections that the questions revolved around the financial considerations that companies take into account when making capital investments abroad. These are the factors that were decided to be explored and studied for the purposes of this research.

The section itself made use of a Likert scale which formed a continuum that would help when drawing a conclusion, as it allows for scores to be assigned to each option chosen. Firstly, the options ranged from ‘not important’ to ‘extremely important’, thus each option, when measuring the results, could be assigned a score from one for ‘not important’, to five for ‘extremely important’. This scale was to be used within this section, to explore the relative importance that respondents assigned to the listed factors. The particular factors were found in numerous studies to have an effect on the decision whether to undertake foreign capital investment or not. Five of the thirty-six questions provided space for respondents to add any other factors they may have found important. The five groups of questions were set out randomly with the order of the groups having no preference. Instead they were grouped according to questions centred on similar topics, so as to avoid jumping between topics. The questions delved into the various sections within which they were grouped without going into too much detail; a lengthy questionnaire would have risked respondents losing interest and giving inaccurate answers to finish the exercise.

7.4.2.2 Section 3: The most important problem areas encountered in making capital investments abroad and solutions to solve them

Section three consisted of 16 questions. The section focused on topics similar to what was discussed in the first section. This section, however, focused on the problems that companies encountered in making capital investments abroad. Respondents were asked to choose the five most important problems they encountered, in no specific order. They were then asked to provide possible solutions to the problems which they had selected. Space was provided so that respondents could once again include any options they felt may have been overlooked, or that may have occurred in their cases specifically.

7.4.2.3 Section 4: How often the determining factors are factors adjusted to be in line with needs and practices of the foreign country and companies

This section concentrated on the companies and their experiences after having made capital investments abroad. This was important as companies need to tap into the experience they and their executives had while making such investments. Of course the other sections of the questionnaire were also intended to tap into the large amount of experience these executives had gained, but those sections concentrated on the process prior to and while making the capital

investment. This section concentrated on the process following the investment and while running or being involved in the company. It was aimed at researching factors that may have needed to change frequently, or not, to be in line with the needs and practices of the foreign market and company. This was important because factors or occurrences in the foreign market are not stagnant, and in some instances are constantly changing. These are the results of new and dynamic markets with which companies may be unfamiliar, or which may constantly need to be adjusted. This is important, so that new companies venturing into foreign investments may be aware of factors that may require adjustment.

The section was relatively short, consisting of only 10 questions. A Likert scale that formed a continuum was once again made use of, while the respondents were allowed to choose between five options, ranging from 'always' to 'never'. These options were also assigned scores ranging from 1 for 'never' and 5 for 'always'. This made it possible for the answers to be weighted and scored, and ultimately rated against each other. This process allows the accurate rating and ranking of factors, and also simplifies the process of doing so. All the factors used within the section form part of the financial decision-making process, and have some bearing on the process. This section was also fairly simple for respondents to answer as it did not ask for a large amount of information to be provided.

7.4.2.4 Section 5: Other information needed

This was a relatively short section that required respondents to provide certain figures applicable to the company. The information asked for is widely available and also of a public nature. Respondents ought not to have had any problems completing this section. The information in this section was used for the chapter on sensitivity analysis. The exact uses of the information provided will be discussed in the section that concerns the sensitivity analysis itself.

The section consisted of five questions that needed short answers only. The first two revolved around the number of years which the company had been involved in making capital investments abroad. The first focused on the average duration of the company's capital investments, and the second question related to the number of years that the company had been involved in making capital investments abroad. The next two questions involved the number of employees employed by the group of companies, asking specifically for the number of *permanent* employees and also the *total* number of employees (also including temporary employees). The final question focused

on the amount of total assets owned by the group of companies. Most of the information requested may be freely available, but it was the duration and experience of making capital investments abroad that may not always be available. Thus the information was searched for, but in the case of unavailability an educated opinion was obtained. As mentioned above, the uses of this information will not be discussed here, but in the section concerning the sensitivity analysis.

7.5 Research process

The research process itself involved combining all the individual aspects proposed within the empirical study, and the setting of this into motion. This process proved to be a task that could most certainly not be undertaken half-heartedly. It proved to not only require tremendous planning, cost and; outside help, but also a certain level of calmness. These factors would prove to be the key to ensuring that the process itself would run smoothly, and also be completed in full. It must be said that the help received in this process proved to be invaluable and the level of appreciation cannot be expressed sufficiently.

The process itself began with sending out the letters of invitation to the 46 selected companies in Johannesburg and Cape Town. These were sent via the traditional postal system. It would have been simpler and faster if they were sent via e-mail, but without prior notification and alert, individuals to whom they were addressed may have discarded them without a look. It was also possible that they may have taken a look and then discarded it as they could have taken the view that it provided no benefit for them, while making use of their time. The letters were sent along with a self-addressed and stamped envelope for return to the University. Respondents were allowed 10 days for returning their responses via the postal system; of course it may have taken less or more time for returning it, but a sense of urgency needed to be instilled. It also provided a date from which follow-up was to be undertaken, as it was expected that the vast majority of companies would not respond. This prediction held true as only four companies used the postal method to return the letters. This led to an uphill battle that required much attention and persistence as at least another 26 responses were needed in order to move forward with the research. A few more days were allowed before the actual follow-up process began as there may have been a delay in some of the responses being returned. The process was further delayed due to the strike of postal staff that occurred at the time of the letters being posted. This was further

evident as many executives confirmed that the actual letters had arrived after the due date that had been specified.

The actual follow-up process began promptly once the time stipulated for the return of the letters had lapsed. The process started with telephone calls to the relevant offices of the executives to whom letters had been posted. Forty-two companies had to be contacted. The majority of the personal assistants to the *chief executive officers* were very welcoming and helpful; without them much of the research could not have been done. The purposes of the telephone calls firstly were to establish whether the letters had been received, and whether a response could be expected. As indicated earlier, many stated that the letter in question had not been received, due to the postal strike taking place at the time. The further reason for the telephone call was to make them aware of the request to assist in carrying out the research and to ask for an e-mail address so that an electronic copy of the letter could be forwarded. This was then forwarded to the companies that had not received the letters, and also to those who had indicated receiving it, but stated that an electronic copy would be easier to forward around the company and was also a more direct approach for returning it.

In most cases the *chief executive officer* was too busy to handle the request, which meant another representative had to be found and this process was done in three different ways. Firstly, the personal assistants themselves offered to find an appropriate person who could provide the information being asked for. Secondly, the personal assistants provided the details of the person they thought would be suitable, or they forwarded the electronic copy of the letter sent to those persons. Lastly, when personal assistants were not able to lend a hand, research into the company structure and positions held were undertaken and a trial-and-error approach was used until the correct person was found. This process in itself proved to be the most difficult aspect of the research as the request bounced around from office to office a number of times before the correct person was reached. This was an extremely frustrating procedure that lasted roughly eight weeks altogether, two for the initial postal letters being sent out and a further six weeks for the follow-up process to get the necessary responses.

The follow-up process ended after the six-week period when more than 30 responses had been received from the companies contacted. All the responses that were received during the period were received via e-mail after the request had been sent out for the second or third time. This

was the minimum number of responses required for the research, as targeted from the start. To summarise the process: thus far, 32 companies had provided positive responses, five declined and letters from nine companies were still pending. It was decided at this point that an acceptable number of responses had been obtained and the next phase of the research had to begin, as time was moving on. This was due to the fact that it was already late October 2009. Many executives take leave during December and many companies are closed for a long period of time. Thus it was decided that the research would have to commence or be left to the following year.

The next phase of the research would prove to be quite a task. The companies in Cape Town could be visited at any time as they did not require any travelling other than by car. The plan for Johannesburg was to travel to Johannesburg, stay there for a period of two full weeks and conduct all the interviews during that period. One trip was decided on as it would be too costly to undertake more than that. It was also seen as reasonable to expect that all interviews could be conducted within two weeks. Furthermore, many of the companies were based within close proximity of each other. The companies were sorted into groups according to geographic location to cut down on unnecessary travelling from one side of the city to the other, which may also have proved difficult because of unfamiliarity with the roads of Johannesburg. It was decided that doing three or four interviews per day would be reasonable, especially if the companies who were grouped together could be visited on the same day. This, however, was only a hope, because expecting more than 20 high-powered executives to fit perfectly into a student's proposed day plan was expecting too much. This process, however wishful it may have been, was decided on as it made logical sense.

The next step, to contact respondents who granted permission for an appointment, did not prove to be too difficult, as contact details had been requested in the letter sent out. This was done during the week before the proposed time of leaving for Johannesburg, which fell during the last week of October, while the proposed dates for the interviews fell within the first two weeks of November. This process was undertaken entirely via telephone, dealing either with the respondents themselves or with their personal assistants. As the companies were grouped according to geographic location, dates were forwarded and it was left to the respondents to decide whether it would be possible. In most cases the dates were accepted, but where they were not acceptable, other days were available. As most of the companies were based within Sandton

and Central Johannesburg, they could be swapped out for each other as necessary. This proved to be useful as some flexibility was attained. The Cape Town appointments were not arranged at this point in time; they could be done at any time, but as the end of the year was fast approaching, Johannesburg had to be dealt with.

7.6 Data collection

Data collection in Johannesburg and Cape Town are discussed separately.

7.6.1 Data collection in Johannesburg

Most of the companies that accepted the research request had made time available for the interviews to take place by the time of leaving for Johannesburg. A few interviews that were still pending could also have been arranged as enough time was available. The plan was to conduct the maximum number of interviews while in Johannesburg as most of the companies were based there and also because all had to be completed in one trip. The interviews ran smoothly while in Johannesburg, with a few exceptions. In some instances, respondents chose to re-arrange the appointments due to other commitments and there also were instances of respondents simply cancelling the arrangements. The number of companies became more limited as not all companies could allocate time for the interviews within the two-week period, but the companies whose appointment times were still pending indicated that they had time available. This then added to the number and compensated for those companies who had cancelled their appointments. Another complication was encountered in some instances when respondents argued that the interview was unnecessary and completion of the questionnaire in their own time would be sufficient. With a bit of persuasion some came to accept the request and make the time available. In a few instances, however, respondents had to complete the questionnaire in their own time and forward it via e-mail as they were completely unable to find the time to carry out the interview.

During the two-week stay in Johannesburg, 20 personal interviews were conducted in total. This was short of the number of companies that had been intended for interviewing in Johannesburg. As mentioned above, this was due to the fact that some respondents had to cancel appointments and these appointments could not be re-arranged for a later stage as Johannesburg was only to be visited once for the purposes of the study. The option of allowing companies to complete the questionnaires and return it via e-mail therefore came into play. There was also no other option

as the target of 30 completed questionnaires had to be reached. The responses had to be followed up via constant telephone calls and e-mails, but this proved to be vital as these attempts helped to produce an additional four completed questionnaires, leaving only an additional six questionnaires to be completed in Cape Town. Of the 24 companies that provided responses, *one indicated that they did not have existing capital investments abroad*. This was partly due to the fact that they were a subsidiary of a multinational company who themselves did the foreign investing on a global scale. That company was asked to respond in any case as the questionnaire revolved around financial considerations taken into account when making capital investments abroad. *They could thus complete sections two and five of the questionnaire, as sections three and four revolved around the problems experienced during the process and section four dealt with the changes that had to be made while having investments abroad*. They could also only answer selected questions in section five, but it was preferred that they fill in the questionnaire as far as possible.

7.6.2 Data collection in Cape Town

The research to be done in Cape Town was limited to a possibility of 10 companies in and around the Cape Town area. At the time of leaving for Johannesburg, eight companies had indicated that they were willing to take part in the research and the decision of the other two was still pending. This meant that, with the 24 responses obtained previously, the target of 30 responses was likely to be reached. There was no real sense of urgency, as there was with the companies in Johannesburg, mainly due to the fact that information from the Cape Town companies could be gathered at any time because of being based within driving distance. It was decided, however, that it would be best to complete all interviews as soon as possible to ensure that the responses were received and the study could continue.

These interviews were not crammed into a specific period of time as in Johannesburg. Instead they were conducted with little pressure, usually with only one interview per day. Five interviews were carried out in companies based in Cape Town, two of the companies that had indicated that they would participate were either too busy at the time, or were still busy bouncing the request around the company. This left one more questionnaire to be completed to fulfil the minimum requirement of 30 responses to be obtained. The last completed questionnaire was

received from a company within Cape Town and the minimum requirement of responses was obtained.

7.6.3 Outstanding requirements

The targeted number of 30 responses, the minimum requirement decided on at the commencement of the study, had been reached. It would, of course, have been in the best interest of the results to try to obtain as many responses as possible, as this would have improved the reliability of the information obtained from the study. Forty-six companies were expected to be available as candidates for conducting the research, after those beyond the chosen geographical areas had been excluded, and the duplicate case of both the operating and holding company being included in the top 50 company rankings had been dealt with. Thirty of the forty-six companies available participated in the research and a further five declined the request to participate from the start. This left 11 companies that were still eligible to be interviewed and to complete the questionnaire.

The 11 companies that had not indicated whether they were willing to participate were not interviewed due to reasons such as inability to allocate time as they had other priorities or deadlines pending, e.g. the end of their financial year or the executives being out of office. One executive travelled constantly during the period of the research and was concerned that he would not have the time available to participate. Another reason for not participating was that the request was bounced around the company for the entire period since it was first sent out. Thus they did not decline the request, but at the same time also did not accept. This was frustrating: as soon as progress was being made, there was a change; either the nominated person was changed or he/she felt they were not the appropriate person for the request. This could have been prevented by them choosing to decline the request at the start.

All the outstanding responses from companies were followed up to try to obtain a greater number of completed questionnaires to improve the results of the study. This attempt proved to be fruitless and was eventually relinquished as it was evident that the requests were forgotten or lost in the pipeline of these huge company structures. This was an area where the research could have been improved. However, the important thing to note is that the required responses were obtained for the study to move forward. The limitations of the study will be discussed in the section to follow.

7.7 Limitations of the research

There have been limitations to every study ever done. Such limitations may not be large, but more than likely involve improvements that could have been made. It is important that there should not be large limitations in the study and its methods, as this could cause shortfalls in the study as a whole. Shortfalls need to be avoided for obvious reasons, and this has hopefully been done in the current study. Every researcher needs to be aware of this, though, as it may provide guidelines for future studies within similar fields. It may also provide the reader with some key points for consideration when reviewing a particular study. Lastly, failing to indicate the perceived limitations may reflect on the integrity and objectiveness of the researchers themselves.

This study, as most others, could have been improved in a number of ways. Firstly, a larger number of interviews could have been used as it may have improved the reliability of the information and results that were produced. Obtaining more interviews was not possible due to the research method chosen. Personal interviews require much preparation and planning as permission has to be obtained and appointments have to be arranged. In addition to this, travelling incurs expenses and increasing these expenses would increase the total cost.

Secondly, although the study was specified to only concentrate on the financial considerations with regard to making capital investments abroad, including other factors such as social, political or economic conditions may have made a positive contribution to the study. These were considered at the commencement of the study, but were decided against. The main reason was that those additional aspects could not be numerically measured because many social and political variables cannot be measured as they are largely subjective. They rely on opinions and have no sure way of being measured accurately and effectively. The above-mentioned factors also have a long time lag before their effects are felt. There is a large gap between when legislation is drawn up and when it is approved, while a large gap also occurs between the time of approval and the time for the effects to be felt. This could, in the worst case, extend to a time after the study needs to be finalised or the full effect could be visible only after the study is finalised.

The third limitation resulted from using the top 50 companies in South Africa, which meant that companies from various sectors of business were chosen. This could have been improved by

dividing the companies into their respective sectors and choosing to concentrate on one or a few of them specifically. This is a mere suggestion as there are benefits and drawbacks to using either method. Sector analysis would have meant that companies much further down in the ranking would be included, while also limiting the numbers available. The method that was used provided a diverse and mixed opinion, but a lot of the financial considerations taken into account depend on the overall strategy and direction of the company, and not on sector-specific characteristics.

Lastly, the study could have made use of companies of different sizes and not only the 50 largest companies. If some of the small or medium-sized companies had been included, the considerations could have differed as companies are frequently in different stages of their existence, which would produce different reasons for international expansion. This was abandoned as there were far more advantages than disadvantages in including only the largest companies within South Africa, which are considered to be the business leaders.

7.8 Conclusions

The research methodology of this study has been discussed in-depth, with consideration of all relevant aspects. The chapter commenced with the discussion of the population and sample of the study. These are important aspects when introducing an empirical study as an incorrect population and research sample could be detrimental to the study. The research design embodies the research method and the development of the questionnaire. Personal interviews with high-level executives seemed to be an effective research method for the study. It was pitched to respondents involved with the financial strategic decisions of the company. The medium by which the questionnaire was conveyed was well coupled with the interview method as it allowed much additional information to be provided. This was a good strategy for producing the results and meeting the projected aims.

Much of the chapter has focused on the actual research process, which was lengthy and took a number of months to undertake. This has been attributed to a variety of reasons: partially to the time it took to contact the companies and find the correct person who was willing to participate in the research. This was followed by the challenge of arranging the actual appointments with busy high-level executives. The challenge did not end there as, even though appointments had been arranged, a number of unforeseen circumstances resulted in changes in arrangements. The

actual carrying out of the research proved to be extremely interesting and provided a number of important insights. The relevant sections of the questionnaire helped the process as it allowed questions on similar topics to be discussed together. The setup of the questionnaire proved to be vital in achieving the objectives of the empirical study.

It is important to assess the research methodology of an empirical study. Objective evaluation and assessment are necessary to determine the effectiveness of a particular study. In this regard it is important to not only consider the positive aspects, but also the limitations. A number ways in which the study could have been improved have been mentioned, which should give some guidance if a similar empirical research study were to be undertaken. In conclusion, a well-rounded research methodology may be the most important part of any empirical study as it will ultimately determine the results of the study.

CHAPTER 8

RESULTS OF THE EMPIRICAL STUDY

8.1 Introduction

The previous chapters were aimed at introducing and exposing the existing research gap. This research gap facilitated and stated the necessity for undertaking this study. The previous chapters also discussed the background to the topic itself and the related aspects that would be encountered during the course of the study. These chapters are important to the structure and overall flow of any research project. A well-researched literature review could be harmed by an empirical study that is not well executed.

The research methodology and methods that were used in this study were introduced in the preceding chapter. The chapter embodied not only the methods that were used in conducting the empirical research, but also stated the process carried out to obtain the research results. This chapter will now discuss the results obtained when carrying out the empirical study. The raw scores obtained when applying the questionnaires will be presented first. This is necessary to show proof of the results obtained and also to help the reader understand the way in which the results and conclusions were derived. The ranking of the results and methods used, will follow thereafter. Lastly, a discussion of the findings will be presented in order to draw conclusions and make recommendations from the study.

The chapter will be set up in much the same way as the actual questionnaire was structured. Thus it will start at section two of the questionnaire and proceed until section four. Section one will not be presented as respondents were assured that their participation, views and answers would be handled in a discreet manner and no information would be divulged. Section five will not be discussed, as the data obtained in that section will be used for the sensitivity analysis (in the next chapter). The overall setting of the various sections and the order of the discussions may differ slightly, but should follow the overall structure introduced above.

It was mentioned in the previous chapter that one respondent answered the questionnaire partially (see Section 7.5.1). To enable the comparison of the weighted responses, the answers of

this respondent do not appear in the following tables. The responses of 29 companies were therefore taken into account.

8.2 The perceived importance of the determining factors in the process of considering making capital investments abroad

The aim of the section was to ascertain which of the listed factors that were obtained from the literature review were perceived to be the most important when considering making capital investments abroad. The list consisted of 31 factors that were split among five sections. Each section included an "other" option so that respondents could feel free to provide any additional factors that may have been overlooked while drawing up the questionnaire. The presentation of the results in this section is done according to the format of the questionnaire and the sections which were followed in it.

Within each relevant section the raw data are presented in the format of a table. The raw data table simply states the number of responses obtained from each relevant question. This is necessary to simplify the process when summarising and calculating the relevant responses. It is also important, as stated above, that disclosure of the results helps to show the way in which the conclusions were derived. The table containing the raw data is followed by a table presenting the weighted scores of each section. The weighted data was obtained from assigning a score to each option chosen from the Likert scale used for this study. It was stated explicitly on the questionnaire that the five options form a continuum and can therefore be weighted. A score of five was allocated to 'extremely important', four to 'highly important', three to 'moderately important', two to 'little important' and one to the 'not important' option. This scale proved to be useful as it allowed an accurate and appropriate form of measurement to be assigned to the relevant options presented. Once all the weighted responses were calculated, they were presented in the table, ranked from highest scoring and most important factor, to the least important and lowest scoring factor. The discussion of all factors will follow once the tables have been presented.

It should be said that not all factors will be discussed, but only the most important factors. The least important factors might also receive some attention. As mentioned above, an "other" option was allowed for respondents to include information that had been overlooked. These other options will not be discussed, except in cases where a trend towards the option was found.

8.2.1 Taxation considerations

The following table presents the data dealing with the taxation considerations when making capital investments abroad as obtained from the respondents. The numbers in the table represent the number of respondents who chose that particular option as their answer.

Table 8.1 The importance of the taxation considerations as perceived by the responding companies

TAXATION CONSIDERATIONS	Extremely important	Highly important	Moderately important	Little important	Not important
Taxation in the country of the home company	6	8	10	2	3
Taxation in the country of the foreign company	7	13	8	1	0
The establishment of a controlled foreign company	4	8	10	5	2
The use of a residence-based or source-based principle of taxation by a foreign country	5	7	11	5	1
The event of double taxation without any recourse from countries	7	11	9	2	0
The use of unilateral relief agreements between countries	6	9	12	2	0
The response to tax incentives offered by countries to induce foreign direct investment	2	11	13	2	1
Appeal of a tax exemption as an incentive to invest	4	8	12	3	2
Appeal of a reduction in the rate of taxation to be used in the foreign country as an incentive to invest (excluding tax havens)	3	10	10	6	0
Undertaking a capital investment in an international tax haven	1	3	15	7	3
Appeal of a deferral of the tax liability to a later time as an incentive to invest	2	4	15	6	2
The use of thin capitalisation from the home country and debt from the foreign country	2	9	11	6	1
Other considerations	8				

The next table presents the weighted responses obtained from Table 8.1 relating to the tax considerations. The responses were obtained by assigning scores to each option, as discussed above. The table shows the results of the scoring, and ranking according to scores obtained, ranging from the most important to the least important factors.

Table 8.2 Weighted responses with regard to the importance of the taxation considerations as perceived by the responding companies, in a declining order of importance

Total weighted score calculated	Declining order of importance	Taxation considerations
113	1	Taxation in the country of the foreign company
110	2	The event of double taxation without any recourse from countries
106	3	The use of unilateral relief agreements between countries
99	4	Taxation in the country of the home company
98	5	The response to tax incentives offered by countries to induce foreign direct investment
97	6	Appeal of a reduction in the rate of taxation to be used in the foreign country as an incentive to invest (excluding tax havens)
97	6	The use of a residence-based or source-based principle of taxation by a foreign country
96	8	Appeal of a tax exemption as an incentive to invest
94	9	The establishment of a controlled foreign company
92	10	The use of thin capitalisation from the home country and debt from the foreign country
85	11	Appeal of a deferral of the tax liability to a later time as an incentive to invest
79	12	Undertaking a capital investment in an international tax haven

It is evident that, in terms of the taxation considerations included in Table 8.2, the most important factor was the taxation in the country of the foreign company. It can be seen from Table 8.1 that the majority of companies perceived taxation in the country of the foreign company with a significant amount of importance. This majority included 20 out of the total of 29 companies participating in the research, while eight companies saw it as moderately important and one company found tax to be of little importance. The company that stated that they viewed it as of little importance indicated that they found that tax was necessary and unavoidable. They

also stated that their experience showed that tax was on par with South Africa and that, while there were countries where rates were lower, overall it was of too little significance to deter them from investing within another country. The factors which are discussed in this section all have a combined effect on the company. The combined effect of all these factors is that the profit or return that the company experiences on its investment is reduced when tax is imposed. The return on the investment after taxation is of course the reason for undertaking any business venture or opportunity. Thus taxation will need to be considered carefully and with full information available as it could have a considerable effect on the investment decision.

The responding companies were large companies that have been in operation for a number of years, and as such they could be expected to be well aware of the tax structure of their home country. It may, however, have been difficult to be fully aware and up to date concerning the complete tax system and legislation of the foreign country. This could also be difficult if a company is not faced with a specific opportunity, but instead considers a list of countries and is faced with the need to examine all possibilities. Examining the tax structure will need much time, as well as human and capital resources, to be completed fully. How demanding this exercise may prove to be, it is extremely necessary as it is an important aspect of foreign investment. The tax structure will have numerous effects on the company as it will determine where tax is payable, the tax rate that will be applied, the amount of tax to be paid and also the conditions on which all this depends. There are also other positive aspects that involve tax, such as ways to reduce the tax liability, tax loopholes and investment incentives offered via the tax system. The bottom line is that the tax system of the foreign country is extremely important and needs to be considered in relation to the tax system of the home country. Tax is not a stagnant topic and as legislation changes constantly, it is important to monitor these changes and be aware of the interaction or relationship between the tax systems of the home and foreign country. This interaction may also be of great importance in matters such as the principle on which tax is applied. Some countries may apply the source-based tax principle, while other countries may apply the residence principle. This is a prime example of something that has much importance because double taxation may occur if two countries do not comply or work together.

The occurrence of double taxation is the second most important factor in the process of considering making capital investments abroad. The vast majority of companies indicated that it

was extremely, highly or moderately important while only two companies selected 'little important'. Double taxation has previously been defined by Danzinger (1991:317) as the occurrence where comparable taxes are levied by two or more countries on the same taxpayer for the same subject matter and for the same tax periods. This has a far larger negative effect on the returns experienced by a company as only the taxation of the foreign country, but may be voted second due to the fact that it is a direct result of not only the foreign country's tax regime, but rather the interaction between the home and foreign country regimes. Taxation from a specific country reduces the company's profit and returns by the tax rates applied, while double taxation is the occurrence of that taxation twice over. This must be avoided through the various measures available as it will have a crippling effect on the investment undertaking itself. The tax systems, once again, need be studied in relation to each other and double tax agreements need to be researched at the same time. South Africa does have a number of arrangements with other countries in respect of the matter and some companies may have the leverage needed to influence government to arrange alternatives to alleviate the problem. Possible solutions to the problem of double taxation will follow, as it was discussed with respondents in relation to a later section of the research.

The third most important factor was that of the use of unilateral relief agreements between countries. The votes were cast in a similar manner as that of the votes for double taxation, with most respondents selecting extremely, highly or moderately important. This ties in directly with the previous factor, because if such agreements did not exist, double taxation might be experienced. Thus it could be expected that the two factors would be ranked closely. Countries may arrange agreements according to the needs that arise. The agreements will vary according to the provisions and conditions stipulated on entering into the agreement between the countries. In addition to this, there are guidelines drawn up by outside bodies such as The United Nations Model Double Taxation Convention between Developed and Developing Countries, and the Organisation for Economic Co-operation and Development's (OECD) Model Tax Convention on Income and on Capital. These agreements aim to prevent the occurrence of double taxation between countries, and also to limit its effects. This, however, differs from double tax agreements drawn up directly between countries as they are third party organisations who offer only guidelines and membership, but do not themselves administer the agreements like two individual countries may. It is surprising that, although the unilateral relief agreements and the

occurrence of double taxation are the second and third most important factors, the respondents chose to provide little additional input.

The fourth most important factor encountered was the taxation in the country of the home company. It is now clear that the first four factors have a direct relationship, and when combined are the causes of, and contributors to, each other. The relationship between the home and foreign country taxation regimes play a role in the occurrence of double taxation, while the double tax and other relief agreement issues are derived directly from the home country's taxation regime. This factor will be especially important when moving capital out of the home country at the time of investing, and also when repatriating profits back to the home country. The advantage when considering taxation of the home country is that companies may be familiar and aware of the legislation and possible loopholes that may be used.

Both the fifth, one of the sixth, and the eighth factors are also closely related to each other. These factors are types of possible tax or investment incentives frequently used by countries to induce foreign direct investment into their countries. The reason could stem from the large initial capital outlays, and the long waiting period for recovering the initial costs may be improved with the use of tax incentives such as a tax rebate, credit or deferral. The other factors in the section were not to be discussed as they are not as important, while at the same time a discussion of all factors would involve lengthy discussions.

Although the individual factors are discussed above, a general view of the concept of taxation with regard to the process of considering making capital investments abroad is needed. This is necessary because, although there were indications of which factors are more important in the process itself, there was a widely expressed view on tax as a whole. There seemed to be a common view that tax itself as a whole was not a so much important as a primary consideration, but rather as a secondary factor. Most companies who took this view stated that it was so because taxation is not an investment driver and they would not base an investment decision on the taxation situation. Some companies took the view that the decision to invest was a strategic consideration and depended on the strategic direction of the company itself. They stated that tax as a consideration was only one factor in the whole process. The bottom line was that taxation is secondary and will only be considered when calculating expected returns and profits. Taxation is

a purely financial consideration as it may lower the profit expected, and ultimately the return expected by the company.

8.2.2 Interest rate, inflation rate and foreign exchange rate considerations

The following table presents the data dealing with the interest rate, inflation rate and foreign exchange rate considerations when making capital investments abroad as obtained from the respondents. The numbers in the table represent the number of respondents who chose the particular option as their answer.

Table 8.3 The importance of the interest rate, inflation rate and exchange rate considerations as perceived by the responding companies

INTEREST RATE, INFLATION RATE AND FOREIGN EXCHANGE RATE CONSIDERATIONS	Extremely important	Highly important	Moderately important	Little important	Not important
The foreign inflation rate in comparison to the home country's inflation rate	1	6	10	10	2
The extent to which foreign rates of exchange between countries need be considered	2	15	7	3	2
The relationship between exchange rates and inflation rates in the home as well as the foreign country	2	13	6	6	2
The level of interest rates in relation to the home country's interest rate	0	9	9	6	5
The relationship between inflation rates and the interest rates which will impact on the real interest rates in the home and foreign country	1	9	9	6	4
The availability of foreign financing relative to the home country	5	13	4	6	1
Other considerations	10				

The next table presents the weighted responses obtained from the preceding table relating to the interest rate, inflation rate and foreign exchange rate considerations. The responses were obtained by assigning scores to each option, as discussed above. The table shows the results of the scoring, and ranking according to scores, ranging from the most important to the least important factors.

Table 8.4 Weighted responses with regard to the importance of the interest rate, inflation rate and foreign exchange rate considerations as perceived by the responding companies, in a declining order of importance

Total weighted score calculated	Declining order of importance	Interest rate, inflation rate and foreign exchange rate considerations
102	1	The availability of foreign financing relative to the home country
99	2	The extent to which foreign exchange rates between countries need be considered
94	3	The relationship between foreign exchange rates and inflation rates in the home as well as the foreign country
84	4	The relationship between inflation rates and the interest rates which will impact on the real interest rates in the home and the foreign country
81	5	The foreign inflation rate in comparison to the home country's inflation rate
80	6	The level of interest rates in relation to the home country's interest rate

It is clearly evident from the above table that the most important factor in terms of interest rate, inflation rate and foreign exchange rate considerations is the availability of foreign financing relative to the home country. The amount of consideration given to the availability of foreign financing relative to the home country will be dependent on the country from which the company wishes to obtain financing. It has to be borne in mind that these are 29 of the largest companies in South Africa, and in most cases the financing required is readily available to them. The key issue concerns which source of finance presents the lowest cost, least volatility and risk and at the same time provides them with the best terms and conditions under which to accept these loans. The chosen source of finance differs from company to company, depending on their respective preferences. Some companies choose to borrow in their home country, use cash

directly from the holding company's balance sheet, to borrow from sources in the foreign country or, lastly, to borrow from an outside source completely. Some companies stated that they find that a currency mismatch is produced when raising capital in rands and having to export it to other countries. They find that this mismatch is a greater risk which they prefer to avoid and which is best achieved by raising capital in the foreign market.

The extent to which foreign exchange rates between countries need to be considered was seen as the second most important factor when making capital investments abroad. This is due to the fact that moving capital or monetary assets between two countries gives rise to foreign exchange risk being experienced by the companies. This takes place when sending the initial or additional capital of the foreign country, repatriating earnings back to the home country, or any other movement of currency between countries. This currency mismatch and movement may have a positive or a negative effect as profit or loss may occur. Some companies may be open to this risk and would leave the position open while others may prefer to lock in a rate and use hedging in its various forms. Various forms of hedging instruments are available for use by companies. A common method used is to denominate the currency in the form of a widely accepted currency such as the US dollar. A well-calculated and prepared opportunity could be spoilt when the profits are repatriated, rendering the venture unsuccessful.

It seems that the other factors mentioned in the table were of lesser importance to the respondents. Many companies have expressed particular views on the inflation and interest rate considerations, and also on the combined effect of the two. The main concern with the inflation rate was that it impacts the macroeconomic stability of the country and, as such, the conditions under which trade is undertaken. Other companies stated that their concern with inflation is that it determines the exchange rates between countries and as such needs to be stable in order to prevent additional risk. The inflation rate furthermore has an impact on the cost of financing. This makes the evaluation process more rigorous as the expected return on the project would have to earn a higher rate of return for it to be profitable.

The factors in this section are completely out of the control of the companies as they are determined by external market forces. There are ways by which their effects could be minimised and avoided, but these avenues need to be fully researched to gain maximum benefit therefrom.

It is also important to bear in mind that these factors need to be viewed as a combination and not individually, as their effects on one another cannot be separated.

8.2.3 Cost of capital, capital structure and financial leverage considerations

The following table presents the data dealing with the cost of capital, capital structure and financial leverage considerations when making capital investments abroad, as obtained from the respondents. The numbers in the table represent the number of respondents who chose the particular option.

Table 8.5 The importance of the cost of capital, capital structure and financial leverage considerations as perceived by the responding companies

COST OF CAPITAL, CAPITAL STRUCTURE AND FINANCIAL LEVERAGE CONSIDERATIONS	Extremely important	Highly important	Moderately important	Little important	Not important
The consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company	7	11	8	3	0
The realisation of the net asset value of the home and foreign companies' assets to provide security for debt financing	4	14	7	3	1
Future growth of the home company compared to the foreign company	9	13	3	1	3
Income variability and cash flow variability of the home company compared to the foreign company	3	11	9	4	2
The effect of financial leverage on the home company compared to the foreign company	4	9	10	4	2
Other considerations	8				

The following table presents the weighted responses relating to cost of capital, capital structure and financial leverage considerations as obtained from Table 8.5. The responses were obtained by assigning scores to each option, as discussed above. The table shows the results of the scoring, and ranking according to scores that were obtained, ranging from the most important to the least important factors.

Table 8.6 Weighted responses with regard to the importance of the cost of capital, capital structure and financial leverage considerations as perceived by the responding companies, in a declining order of importance

Total weighted score calculated	Declining order of importance	Cost of capital, capital structure and financial leverage considerations
111	1	Future growth of the home company compared to the foreign company
109	2	The consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company
104	3	The realisation of the net asset value of the home and foreign companies' assets to provide security for debt financing
96	4	Income variability and cash flow variability of the home company compared to the foreign company
96	4	The effect of financial leverage on the home company compared to the foreign company

The future growth of the home company compared to the foreign company has been selected as the most important factor within this section. This is not surprising as this is one of the main reasons why companies make use of opportunities abroad. Companies who have been operating within a particular country or sector that may have been in existence for a long period of time may need to find ways to grow the company. Their target may not be limited to the overall growth of the company, but also include growth in earnings, geographic location, market share and profit margins. This may be due to the fact that the market has matured or because there is a large number of competitors against whom the company may not be able to compete effectively. This is one of the main reasons for a company to expand outside of the realm in which it competes. Not being able to compete locally, or a feasible opportunity abroad with good prospects may be sufficient reason for the company to look abroad.

The growth of the company can be measured in a number of ways; the important factor with growth is that the company should be able to accurately forecast the expected growth using reliable information. Another important point to consider with this factor is that it does not merely refer to the growth prospects in the foreign market, but rather to a comparison between the growth expected in the foreign and home countries. In this regard the significance lies in the fact that, while the foreign country, for example, offers 12% growth and the home country 11% growth, it may be more viable to remain in the home country until all avenues have been exhausted and then to look abroad for opportunities.

The second most important factor in this section, according to the companies consulted, was the consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company. This factor has a number of effects on other aspects of the business as a whole. A very important aspect in the discussion of the capital structure concerns what the weights of the debt and equity have to be in the construction of the company's individual capital structure. This ties in directly with the section dealing with the interest rate, inflation and foreign exchange rate considerations when considering making capital investments abroad.

The third most important factor in this section was not ranked far behind the leading factors. The realisation of the net asset value of the home and foreign companies' assets to provide security for debt financing, is also of importance. It does have some importance, as collateral is a prerequisite to any debt before being granted. Once again, as found in the previous section, the factors tie in directly, as the collateral or realisable value of the company's assets will determine the terms on which a loan will be granted, such as the repayment period, amount granted, repayment structure and, most importantly, the interest rate to be paid. This factor should not be overlooked as it does have an important bearing on the aspects of the investment decision process.

8.2.4. Labour and capital intensities

The following table presents the data dealing with the labour and capital intensity considerations when making capital investments abroad, as obtained from the respondents. The numbers in the table represent the number of respondents who chose the particular option.

Table 8.7 The importance of the labour and capital intensity considerations as perceived by the responding companies

LABOUR AND CAPITAL INTENSITIES	Extremely important	Highly important	Moderately important	Little important	Not important
The degree of operating leverage used within the home company compared to the foreign company	2	9	10	8	0
The degree of business risk experienced by the home company compared to the foreign company	2	15	7	5	0
The level of capital intensity used by the home company compared to the foreign company	5	8	11	3	2
The level of labour intensity used by the home company compared to the foreign country	1	12	8	7	1
Other considerations	4				

The following table presents the weighted responses relating to labour and capital intensity considerations that are based on the preceding table. The responses were obtained by assigning scores to each option, as discussed above. The table shows the results of the scoring, and ranking according to scores obtained, and ranging from the most important to the least important factors.

Table 8.8 Weighted responses with regard to the importance of the labour and capital intensity considerations as perceived by responding companies, in a declining order of importance

Total weighted score calculated	Declining order of importance	Labour and capital considerations
101	1	The degree of business risk experienced by the home company compared to the foreign company
98	2	The level of capital intensity used by the home company compared to the foreign company
92	3	The level of labour intensity used by the home company compared to the foreign country
92	3	The degree of operating leverage used within the home company compared to the foreign company

Many respondents found it difficult to answer these questions, as they are theoretical concepts that are not dealt with directly during the normal operations of a company. This does not mean that they are not important. It simply means that they are not as evident to companies as others, whose effects are seen through the performance of the company. These, in addition, are factors that are researched and considered before taking the decision to invest and are not constantly reviewed and observed once the investment decision has been made. Regardless of this, the factors were introduced, clarified and explained, when this was requested, so that the interview process could move along smoothly. The results are a true reflection of the positions and views held by the various companies on the questions being asked.

The most important factor as identified in this section was the degree of business risk experienced by the home company compared to the foreign company. Brigham and Daves (2004:994) have defined business risk as the inherent risk in the operation of the company, prior to the financing decision. Thus it is a combination of all risk factors related to the company itself, as well as the country and industry within which it operates. This kind of risk is comprehensive of the sources of risk a company may encounter, therefore it would be expected that much emphasis would be placed on it.

The second most important factor within this section is the level of capital intensity used by the home company compared to the foreign company. This factor should be discussed in conjunction

with the third most important factor being the level of labour intensity used by the home company compared to the foreign country. Although they were ranked differently, they should be discussed in conjunction due to the fact that they are the inverse of each other. If the degree of capital intensity is increased by a specific proportion compared to the labour intensity, it indicates that the labour intensity is decreased simultaneously. The reason that the level of capital intensity has received a higher ranking is probably that it requires more capital, human resources, research and expertise to introduce and change than the level of labour intensity. Investments in capital intensive projects usually are costly, long-term investments that cannot be changed quickly, meaning that once they are in place, they are intended to be of a more permanent nature. Labour, on the other hand, can be altered quickly, as a company can add or remove workers within a relatively short space of time. The level of labour and capital intensity is largely determined by the industry and sector within which a company operates. The company does, however, still need to decide the extent to which they are going to invest in capital intensive equipment for the venture.

8.2.5 Financial ratio analysis

The following table presents the data dealing with financial ratio analysis considerations when making capital investments abroad as obtained from the respondents. The numbers in the table indicate the number of respondents who chose the particular option as their answer.

Table 8.9 The importance of the financial ratio analysis considerations as perceived by the responding companies

FINANCIAL RATIO ANALYSIS CONSIDERATIONS	Extremely important	Highly important	Moderately important	Little important	Not important
The effect of cash flow in the home company and foreign company	17	8	3	0	1
Liquidity within the home company and foreign company	14	9	5	1	0
Consideration of solvency in the home company and foreign company	14	10	1	3	1
Profitability of the home company and foreign company	18	11	0	0	0
Other considerations	9				

The following table presents the weighted responses obtained from the Table 8.9 relating to the financial ratio analysis considerations. The responses were obtained by assigning scores to each option, as discussed above. The table shows the results of the scoring, and ranking according to scores obtained, ranging from the most important to the least important factors.

Table 8.10 Weighted responses with regard to the importance of the financial ratio analysis considerations as perceived by the responding companies, in a declining order of importance

Total weighted score calculated	Declining order of importance	Financial ratio analysis considerations
134	1	Profitability of the home company and foreign company
127	2	The effect of cash flow in the home company and foreign company
123	3	Liquidity in the home company and foreign company
120	4	Consideration of solvency in the home company and foreign company

The aim of the study was to explore the financial considerations involved when considering making capital investments abroad, and the ratios included in this section show the unit of measurement for the financial prospects of a particular business venture. They are comprehensive enough to include most of the important aspects that need to be considered when carrying out an analysis of a particular business venture. The section did not include the specific ratios that fall under the relevant aspects used as individual factors, as there are a number of them. In addition to this, the ratios are sometimes variations of one another with only minor aspects being changed to accommodate different aspects that need to be considered.

The profitability of the home company and foreign company has been selected as the most important factor. It received a weighted response score of 134, with 18 respondents rating it extremely important and the remaining 11 respondents rating it highly important. It is the main motive for any type of business transaction and without it many would not undertake business transactions and dealings.

The second most important factor, being the effect of cash flow in the home company and foreign company, is closely related to the profitability of the company. The difference between the two is that cash flow concerns only cash inflows and outflows of the company and profitability also includes all purchases and sales on credit. Cash flow is important to the financial prosperity of the company because a company that is not able to convert credit sales into cash could find itself in serious financial difficulty. Cash flow is a large contributor in determining the financial health of a company.

The third most important factor that was obtained from this section is the liquidity within the home and foreign company. Liquidity also ties in with the concept of cash flow within the company. Cash flow concerns the generation and utilisation of cash resources within the company, while liquidity involves the ability of the company to generate cash flow in the short term. The key issue regarding liquidity is that the company should have adequate liquid reserves to meet its short-term obligations.

The fourth most important factor within this section is the consideration of solvency in the home company and foreign company. Solvency is very similar to liquidity, although solvency is the ability of the company to convert assets into cash to meet its long-term obligations. The solvency

ratios show that it is concerned only with the long-term ability of the company to meet its obligations, hence including all assets.

8.2.6 The sixteen most important financial considerations

The following table lists the ranking of the 16 most important financial considerations that were included in this study. The table lists the factors in rank order according to the weighted responses based on the preceding tables. It has been ordered in descending order to show the importance of the relevant factors. It must be emphasised that 29 companies provided answers throughout to all the questions of the questionnaire.

Table 8.11 Weighted responses showing the 16 most important financial considerations as perceived by the responding companies, in declining order of importance.

Total weighted score calculated	Declining order of importance	The 16 most important financial considerations.
134	1	Profitability of the home company and foreign company
127	2	The effect of cash flow in the home company and foreign company
123	3	Liquidity in the home and foreign company
120	4	Consideration of solvency in the home company and foreign company
113	5	Taxation in the country of the foreign company
111	6	Future growth of the home company compared to the foreign company
110	7	The event of double taxation without any recourse from countries
109	8	The consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company
106	9	The use of unilateral relief agreements between countries
104	10	The realisation of the net asset value of the home and foreign companies' assets to provide security for debt financing
102	11	The availability of foreign financing relative to the home country
101	12	The degree of business risk experienced by the home company compared to the foreign company
99	13	Taxation in the country of the home company
99	13	The extent to which foreign exchange rates between countries need be considered
98	15	The response to tax incentives offered by countries to induce foreign direct investment
98	15	The level of capital intensity used by the home company compared to the foreign company

Source: Tables 8.2, 8.4, 8.6, 8.8 and 8,10.

The overall ranking of the 16 most important financial considerations of all the factors that were included within this section of the questionnaire are shown to provide a clear picture of the ranking that each factor received and not only in their respective sections. For example, taxation in the foreign country has been the most important factor in the section dealing with that, yet it scored 21 points lower than the most important factor in the whole questionnaire.

Profitability of the home and foreign company rightly is the most important factor when considering whether to invest abroad or not. It was perceived as either extremely or highly important by all respondents who completed the questionnaire. It has been placed among the top four factors of the sixteen most important financial considerations overall. The other three of the four most important factors are also from the section concerning the financial ratio analysis considerations. The effects of cash flow, liquidity and solvency of the home and foreign company have been perceived to be slightly less important than profitability by only a few points. This without a doubt shows that, individually and collectively, these factors play a very important role in the process of considering making capital investments abroad. They represent many of the key aspects that need to be taken into account when considering undertaking an investment, or once the foreign investment is in place. They are the financial characteristics against which the venture will ultimately be measured. Careful attention needs to be paid to these factors as they have the potential to have an important effect on the foreign investment opportunity as a whole. This is the only group of factors that have been ranked alongside each other, although other groups have formed trends, as will be seen with regard to the next few factors.

A trend was revealed by a number of factors dealing with taxation. Five factors dealing with aspects of taxation have been included in the list of the sixteen most important financial considerations. These factors cover a number of important interrelated aspects of taxation that affect one another. The most important of the lot, however, was taxation in the country of the foreign company. The taxation of the home company was ranked much lower than that of the taxation of the foreign company. The interaction of these two factors forms the seventh top ranked factor, which is the event of double taxation without any recourse from countries. This, again, gives rise to the ninth ranked factor which is the use of unilateral relief agreements between countries to prevent double taxation from occurring. The last taxation factor included is the response to tax incentives offered by countries to induce foreign direct investment. This shows the importance of taxation as a whole, and they reveal a collective impact concerning taxation. Discussing one aspect of taxation involves many other aspects as they are all closely related. Taxation should be considered carefully as it could have a serious negative effect on the company if not analysed well enough. It may, in some cases, produce some positive effects such as tax incentives and certain deductions.

The future growth of the foreign company has been ranked as the sixth most important financial factor in this section. Future growth is especially important when the home market is saturated with competitors, lacks growth opportunities for the company, or the company has grown to be the largest company in the industry. These are examples of possible reasons for companies searching for growth opportunities elsewhere and it also shows that companies should not become too comfortable with their current market positions.

The next group of factors concerns the consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company and its related aspects. This plays an important role as it can have a range of effects on the company. The aspects of these factors have been grouped together due to the fact that they are closely related and also overlap with one another, and also contribute greatly to each other. The main components of a capital structure are debt, equity and preference share capital. Debt capital could be affected by the realisation of the net asset value of the home and foreign company assets as they may serve as collateral for loans and can also produce better terms for loans to be agreed upon. This will not matter, however, if there is low availability of foreign financing relative to the home country. There is another factor that contributes to the capital structure consideration, however. This is the extent to which foreign exchange rates between countries needs be considered. This is the only factor dealing with the economic environment of the foreign country that has been included. Foreign exchange rates could allow large profits or losses that were not accounted for, to be encountered. It must be remembered that, although foreign exchange rates were ranked as the 13 most important financial factors in conjunction with taxation in the country of the home company, it plays an important role as it will affect the movement of capital and profits across borders.

The last group included within the list of most important factors is that of the degree of business risk experienced, and the level of capital intensity used by the home compared to the foreign company. The more important of the two factors is the degree of business risk experienced by the home and foreign company. The degree of business risk needs to be considered as it includes the risk factors specific to the business and the type of industry within which it operates. Companies also need to be aware of the effect these types of factors will have on the capital

intensity of the company. This is due to the fact that they are largely determined by the company and industry within which they operate.

The factors that are not amongst the 16 most important factors, although important, appear not to have such a large impact on the decision to invest as those already mentioned. This does not mean that they should be overlooked, but many respondents viewed them as secondary, or something that can be worked around. What is even more important than a consideration itself is that a factor should be considered within the context of the sector or industry within which the company operates. Different factors and characteristics influence sectors in different ways and should be remembered as it could bring about considerable differences. Another important aspect is that there is no standard way of assessing foreign investments amongst companies. Instead it differs from company to company, as each may place emphasis on different aspects of the process as a whole. One of the most valuable impressions gained throughout the questionnaire and interviews was that nearly all factors are interrelated and connected with one another at some point on the evaluation.

8.3 The most important problem areas in the process of considering making capital investments abroad

The respondents were required to choose the five most important problem areas that they have come across in their experience of considering making capital investments abroad. This section was aimed at exploring the problem areas that companies encountered when making capital investments abroad.

The problem areas were thereafter ranked in descending order. This was done by counting the number of respondents who indicated any particular problem area. This helped to draw a conclusion about which problems were common occurrences and those that occur fairly seldom. Furthermore, respondents were required, to indicate possible solutions to the problems that they have faced.

The problems that were included in the questionnaire are presented in the following table, listing the factors in descending order according to the number of responses. This is followed by a discussion of the relevant problem areas and of the possible solutions suggested by the respondents. As previously stated in the study, all factors will not be discussed, as all are not

equally important. Some received very little attention from respondents and no discussion of those will take place.

Table 8.12 lists the ranking of the problem areas included in this section of the questionnaire. The table lists the problem areas in rank order, as indicated above, according to the number of respondents who chose the particular aspect in their response.

Table 8.12 Responses to the main problem areas encountered, as perceived by the responding companies, ranked according to the number of responses

Number of responses	Declining order of the number of responses received	Problem areas
20	1	Restrictions placed on the cross-border movement of capital between the home and foreign companies
15	2	Escalation in costs, eroding profits and cash flows
13	3	Managing and hedging foreign exchange rate risks
13	3	Lack of reliable information regarding the economic environment of the foreign country
12	5	Financing availability in the foreign country
10	6	Unavailability of enough labourers in the foreign market
8	7	Extremely high tax rates enforced by foreign countries
7	8	Stringent regulations concerning the use of thin capitalisation
7	8	Excessive inflation experienced in foreign countries
7	8	Low labour productivity and high labour costs in the foreign market
5	11	Being taxed within the home and foreign country
5	12	Inability to apply operating leverages
3	13	The lack of incentives offered by possible foreign countries
2	14	High levels of financial leverage used within the foreign company structure
1	15	Inability to obtain and apply capital intensity
12	16	Other problem areas

Note: Some respondents did not answer this question completely

The main problem areas will be discussed in the following sections of the study.

8.3.1 Restrictions placed on the cross-border movement of capital between the home and foreign companies

This problem area was included by 20 respondents among their choice of the five important problem areas encountered when considering making capital investments abroad. The second most important factor received 15 responses, which left no doubt that the first-mentioned problem area is the one which the majority of respondents experienced. This may be no surprise, as restrictions placed on the cross-border movement of capital may cause a number of complications for a company considering making capital investments abroad. Different degrees of restriction may be placed on companies by the government of a country. Restrictions may start from limiting the amount of capital that companies may invest offshore; they may restrict the direction of capital by allowing only inflows and restricting outflows, or they may place complete restrictions on the cross-border movement of capital. Of course the degree of restrictions instituted by the government will determine the level of importance and also the degree to which foreign investment becomes complicated. If the government places a total ban on all outgoing cash flows from the home country, companies will not be able to undertake their proposed capital investments. Furthermore, if the government of the foreign country places a ban on all incoming cash flows it would have the same effect as a total ban on all outflows from the home country. If a company finds itself in a situation where cross-border movement of capital is allowed but limited, there may sometimes be other loopholes around the limited amounts. There are a number of possibilities that are available, although the possibilities will be better understood from the input the respondents have provided.

It was clear that there were four basic thoughts or trends that were possible from the solutions provided by the respondents. The first was that a good relationship was needed with the government of either the home country, or the foreign country, or with both countries. The suggestion also included trying to reach agreements with governments regarding them providing companies with permission to move their capital across borders. This was stated with regard to not the government of the home country only, but also the foreign government, so as to be allowed bilateral allowances for moving capital. It is important to note that these agreements will not be allowed for any company, they are typically allowed for large companies that have leverage through being able to provide positive effects for both governments economically and socially. Of course it goes without saying that this depends entirely on the type of investment

which an enterprise proposed, the timing of the investment and the way it fits into the economic landscape of the two countries.

The second suggestion was to generate cash flows within the foreign market and, as such, generate disposable capital for companies to use instead of injecting further capital into the foreign country. This is a valid suggestion, but it is only applicable in the case of a company that has existing operations in the foreign country. The third suggestion was that to operate within the legal laws and regulations, but employ the laws and its loopholes to get the desired effect. Not operating within the law is not an option, and legal aspects must be complied with fully as any venture operating outside of this could bring detrimental results for the company. This being said, it is acknowledged that there are many instances of shortfalls in legislation that give rise to loopholes that may be used. The last suggestion or trend that companies mentioned, stated simply that where they found restrictions or limitations on the cross-border movement of capital, they would simply avoid entering the market altogether. A few companies stated that, if they were not able to repatriate capital back to the home country, they would avoid the investment altogether.

8.3.2 Escalation in costs, eroding profits and cash flows

This as a problem area is also of extreme importance to a company as it affects a number of different aspects and areas of the company. It is shown by the fact that 15 respondents chose this problem as one of the five problem areas encountered when considering making capital investments abroad. The cost structure differs from one to another in some respect for all companies, although the major differences are found across industries and sectors of the economy and a country as a whole. The effect of a rise in price levels (inflation) will thus affect different companies in different ways and will impact negatively on the cost structure, the profits and the cash flow of a company.

A clear trend could be observed from the suggestions to solve the problem area that were obtained. The first suggestion was somewhat obvious as it basically involved effective cost management. The suggestion was to find innovative ways in which to lower such costs. If all else failed to lower the cost base of the company, the higher costs would just have to be factored into the analysis when this was done and also into the pricing and capital investment costs. The second suggestion was that companies should find ways to have capital and cost synergies. The

basic principle was that two or more companies could derive more benefit from doing things together than individually. It could be applied in terms of costs incurred and incomes derived.

8.3.3 Managing and hedging foreign exchange rate risks

Managing and hedging of foreign exchange rate risks was rated the third most frequently mentioned problem area in the process of considering making capital investments abroad. It was chosen by 13 of the respondents as one of their five main problem areas. The problem with exchange rate risks is that it cannot be accurately forecast, as it is highly volatile and unpredictable. Although the foreign exchange rate risks cannot be forecast with great accuracy, it needs to be managed within the company. It has the upside potential to bring increased returns on cross-border investment, but at the same time has great potential to realise losses for the company.

Those who chose to hedge the risk either chose to purchase hedging options or contracts from financial institutions or viewed their operational setup as a hedge in itself. Another solution was to finance the venture in the foreign country, which acts as an automatic hedge as currencies need not be exchanged or converted.

8.3.4 Lack of reliable information regarding the economic environment of the foreign country

The emphasis on this problem area, which has the same ranking as the previous one, managing and hedging foreign exchange rate risks is not whether companies are able to obtain information regarding the economic environment of the foreign country, but rather on whether the information that is obtained is sound and reliable. Information is easily obtainable through a variety of mediums available to companies and individuals. Some of these mediums may have information that is not based on factual evidence.

Respondents suggested two alternative ways for obtaining the information needed. The first solution was to obtain information themselves by entering into the market or creating a small office. There are ways by which any company can establish a small presence in the foreign market before undertaking the full investment. Sometimes a company prefers to make use of a management team using foreign workers. It gives them an informal source of information from a first-hand source that is familiar with the market in which they are operating.

The alternative suggestion is doing research prior to investing, which seems to be the more obvious option to most. Such research can also be done by company representatives themselves or by using third-party information. The company that chooses to send a team of its own representatives will be able to do its own research from information and data available, have discussions with locals and business players, and also undertake independent market research. This has the advantage that the company can be sure that information obtained will be of a reliable nature. The alternative is to consult third-party research companies or consultants who specialise in this kind of work. This will also ensure that the information obtained is reliable and up to date. The problem with this is that it could come at a great cost to the company. Most respondents chose this as their solution over setting up operations prior to investing.

8.3.5 Financing availability in the foreign country

This factor has also been discussed previously in the study, although the emphasis was placed on the importance of the availability of financing in the foreign country relative to the home country. This time the question concerns the lack of available financing in the foreign country itself. The main solution to a lack of financing in the foreign country was to supply the funding from the company in the home country. These were highly possible for these companies as they are some of the largest companies in South Africa and, as such, are in possession of impressive balance sheets. Smaller companies may find great difficulty in this as they may not be able to obtain the debt financing.

8.3.6 Unavailability of enough labourers in the foreign market

The availability of enough labourers is an issue that has a number of related aspects to it. The availability of labourers ties in directly with the level of skilled and unskilled labourers in the market. The needs of companies will differ, especially because of the level of skills required by particular companies. If companies find a lack of the type of labour which they need, they may be able to make use of expatriates in the foreign country. This may be worthwhile for skilled labourers as the relocation cost involved may be financially feasible.

The second solution was to take labourers and individuals in the foreign market, and send them to the home country for a period of time to train them. This training would typically be aimed at management and skilled labour and was proposed in the form of bursaries, tertiary education and various forms of training and education to produce capable top and middle level managers. This

would hopefully produce managers who were as capable as expatriates taken from the home country.

8.3.7 Extremely high tax rates enforced by foreign countries

Taxation and its effects have been discussed in a number of instances within the study, simply because it cannot be avoided. Taxation is an ever present factor that, at its best will either be reduced, or avoided to some degree through the use of international tax havens. While there are loopholes and methods that companies could use to attain more favourable tax rates, companies that follow this route must remain cautious when taking advantage of these loopholes so as not to step outside the boundaries of the law. In the case of extremely high tax rates being the problem, however, using loopholes may be insufficient to counteract their effect.

The majority of respondents proposed solutions involving the government of the foreign country. This may be the only course as the foreign government is in control of the taxation legislation within their country. The main idea was to undertake negotiations with the foreign government, or simply to maintain good relations with the government. Extremely high tax rates can be very harmful. In a situation such as this, deciding against investing may have more value than deciding to invest.

8.3.8 Other problem areas and solutions used

It was mentioned, at the beginning of this section, that not all factors would be discussed. The seven factors discussed above are the problem areas that most frequently mentioned by the respondents, who selected these as among the five problems areas to be dealt with during the process of considering making capital investments abroad. The remaining factors received less attention, and respondents provided little feedback on the issues. They should not be ignored, but, although they will not be discussed in this chapter, some of the options mentioned under the "other" category of the questionnaire should be mentioned as they may be problem areas to take into account.

The first problem mentioned by a number of respondents was the *lack of infrastructure* within countries. This need is not specific to any type of industry, although some may be more dependent on it than others. Companies proposed that they would collaborate with government to improve the level of infrastructure within the country. This would be a smart choice as it would

be mutually beneficial to all parties involved, depending on the specific type of infrastructure needed. The other problem that was mentioned a number of times, albeit in different terms, was the *political situation* of the foreign country. The concerns mentioned by companies differed, but the first concern mentioned referred to vagueness and unavailability of English versions of foreign country law. It was stated that many countries have home languages other than English. The concern was that there was a lack of English versions of the law and also that the laws were not clearly understandable. The *stability and trustworthiness of the government* was especially important as this could affect investing companies negatively. This particular concern was linked to whether or not the government would later decide to introduce nationalisation of assets and whether a company would have complete protection of their assets. Not much can be done in such a situation except for the company to do a thorough analysis and complete its due diligence correctly. The last problem mentioned in the "other" section of the questionnaire that may be of importance was the *cultural differences and differences in business practices* that prevailed between countries. As this is ever present, the only solution would be to study the foreign market and its practices or employ local citizens who are familiar with these practices. It should be noted that, although these factors have been mentioned here, the main reason for them not having been included in the questionnaire was because they are infrastructural, social and political considerations and not financial considerations, which is what the study was focusing on.

8.3.9 Conclusions

This section should be of value to companies that are in the process of considering making capital investments abroad. It complements the previous section that dealt with the importance of a number of selected factors that come into play when in the process of considering making foreign investments. This section draws attention to potential problems that companies have encountered during their own decision-making process. It also makes companies aware of situations to potentially avoid, or that may arise at some point in time. Companies should first identify the source of the problem and then find possible solutions which they could implement. In most cases, a few solutions could be used, although a company should find the solution that suits the situation best. The solutions suggested by the respondents may have special value for companies that find themselves faced with the problems mentioned above. The companies that took part in the study have a wealth of experience in making capital investments abroad. In

addition they are the largest and most successful companies operating within South Africa, thus their input should be valued.

8.4 How often certain factors are adjusted to be in line with the needs and practices of the foreign country and companies

This section of the questionnaire required respondents to indicate how often they have had to adjust certain factors to be in line with needs and practices of the foreign country and companies. This section made use of a Likert scale; as in section two, and this Likert scale formed a continuum. The given options started with 'always', followed by 'very often', 'sometimes', 'seldom' and, lastly, 'never'. These options were once again assigned scores for ascertaining which factors were changed the most frequently and, as a result, could be considered more dynamic. A score of five was allotted to 'always', four to 'very often', three to 'sometimes', two to 'seldom' and, lastly, one to 'never'. This section focuses on the decision-making phase once an investment was in place.

The section starts by presenting the relevant factors in table format. The tables will firstly show the list of all factors presented to respondents, while the second table will show their ranking according to their weighted responses. This will help to form conclusions regarding which factors require the most attention, based on how often they need to be changed. Table 8.13 presents the data dealing with how often companies adjust certain factors to be in line with needs and practices of the foreign country as obtained from the respondents. The numbers in the table represent the number of respondents who chose the particular option as their answer.

Table 8.13 The frequency with which the considerations are changed to be in line with needs and practices of the foreign country and companies, as perceived by the responding companies

Considerations	Always	Very often	Sometimes	Seldom	Never
Use financial instruments to hedge the foreign exchange rate risk experienced	8	5	7	2	6
Use of equity and/or debt to achieve the target capital structure to achieve an acceptable level of profitability	5	8	10	4	1
The degree of capital intensity	2	9	9	6	2
The degree of labour intensity	1	13	7	5	2
The cost structure of the company with respect to operating leverage	1	16	9	2	0
The liquidity or cash holdings of the home and foreign company	7	10	6	5	0
The solvency needs of the home and foreign company	5	9	10	2	2
To lengthen the intended lifespan of the capital investment abroad	2	11	7	6	2
To shorten the intended lifespan of the capital investment abroad	0	3	6	17	2

Note: One respondent did not answer this section of the questionnaire

The next table presents the weighted responses obtained from the information of Table 8.13 relating to the section dealing with how often companies adjust certain factors to be in line with needs and practices of the foreign country and companies. The responses were obtained by assigning scores to each option as explained above. The table shows the results of the scoring and ranking according to the scores obtained, ranging from ‘always’ to ‘never’.

Table 8.14 Weighted responses with regard to the frequency with which the considerations are changed to be in line with the needs and practices of the foreign country, as perceived by the responding companies, in a declining order of frequency

Total weighted score calculated	Declining order of frequency	Considerations
103	1	The liquidity or cash holdings of the home and foreign company
100	2	The cost structure of the company with respect to operating leverage
97	3	The solvency needs of the home and foreign company
96	4	Use of equity and/or debt to achieve the target capital structure to achieve an acceptable level of profitability
91	5	Use financial instruments to hedge the foreign exchange rate risk experienced
90	6	The degree of labour intensity
89	7	To lengthen the intended lifespan of the capital investment abroad
87	8	The degree of capital intensity
66	9	To shorten the intended lifespan of the capital investment abroad

The considerations which are most frequently changed according to the preceding table will be discussed in the following sections.

8.4.1 The liquidity or cash holdings of the home and foreign company

The liquidity and cash holdings of any company comprise a factor that will change constantly. It is undoubtedly the most commonly changing factor included within this section. Liquidity needs should be observed before entering the foreign market. If the company is aware of the liquidity needs and norms of similar companies in the foreign market, they may be able to put themselves in a position where they do not have to constantly change the cash position of the company. Liquidity and cash holdings may however not always be within the control of the company as there are many unforeseen situations and circumstances that would require them to make payments that have accrued and also that may arise unexpectedly.

8.4.2 The cost structure of the company with respect to operating leverage

The cost structure of the company and the way it is set up with regard to fixed and variable costs determines the operating leverage of the company. The cost structure differs from company to company and also, especially, across sectors and industries. Each company has to ensure that

they are operating at the optimal point with reference to their fixed and variable costs. This may not be easy as there are a number of combinations that could be used. The cost structure will depend mainly on the type of operation being run, the resources the country has to offer and the equipment and level of development of the country. Changing the cost structure of the company is easier said than done. Fixed costs are usually in the form of equipment that comes at a great cost. Implementing a change in the capital equipment of the company requires much planning and preparation. Changing the number of employees should take the prevailing labour laws into account.

8.4.3 The solvency needs of the home and foreign company

The solvency needs of the company ties in with the liquidity needs of the company. Solvency is the long-term ability of the company in relation to liquidity, which is concerned with the short-term cash holdings of the company. Solvency tends to measure the total assets of the company against the total liabilities of the company. The main concern thus is the extent to which the assets of the company exceed the value of its liabilities. The solvency may not be as easy to adjust as the liquidity and cash holdings because it includes all assets and liabilities. A company may, however, have to change the composition of these balance sheet items to ensure that the relevant ratios are held in line with the solvency ratio norms and practices of the foreign country.

8.4.4 Other factors that are adjusted frequently

The top three factors which may need adjustment have been discussed in the preceding sections. Some other factors also need to be touched on. The first being the adjustment of the equity and/or debt to achieve the target capital structure to ensure an acceptable level of profitability. The next factor is the use of financial instruments to hedge the foreign exchange rate risk experienced. If a company decides to make use of hedging, they will be required to adjust it periodically.

Two factors that also require adjustment to be in line with needs and practices of the foreign country, are the labour and capital intensity. This relates to the discussion of the cost structure of the company as it affects the cost structure of the company directly.

The next factor that was shown to require attention was the intention to lengthen the intended lifespan of the capital investment abroad. The reason for expanding abroad may be to establish a

venture more permanent in nature as an ongoing concern. When a company decides to extend the lifespan of the investment, it could be taken as a signal that the financial strength of the company is looking good. The decision to lengthen the intended lifespan of a capital investment abroad would, in many cases, be a highly informed decision as the company would have been exposed to the foreign market for a period of time. They will be aware of the business practices, norms and culture of the new market, as well as having knowledge of available opportunities.

The decision to shorten the intended lifespan of the investment is the last factor to require attention and is the one which should cause the company concern. To shorten the lifespan of the investment is an extremely negative signal for any individual investigating/observing the company. This would mean that the company has suffered losses, has not been able to penetrate the market or has been negatively affected by some external factors within the market. It is a good sign that none of the respondents indicated that they always shorten the lifespan of the investment. Only three chose the 'very often' option, six 'sometimes', seventeen 'seldom' and only two selected 'never'. This is a good result as it indicates that the majority of their investments have been successful.

The next section will highlight the main findings of the study thus far.

8.5 Main findings of empirical study

This section will be divided amongst the three main sections of the questionnaire, in order to group the findings accordingly, namely the importance of the determining factors, the main problem areas and solutions, and the considerations that are frequently changed to be in line with the needs and practices of the foreign country and companies.

The ten most important findings of the section dealing with the perceived importance of the determining factors in the process of considering making capital investments abroad, in a declining order of importance are as follows:

- The profitability of the home company and foreign company.
- The effect of cash flow in the home and foreign company.
- Liquidity in the home and foreign country.
- Consideration of solvency in the home company and foreign company.
- Taxation in the country of the foreign company.

- Future growth of the home company compared to the foreign company.
- The event of double taxation without any recourse from countries.
- The consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company.
- The use of unilateral relief agreements between countries.
- The realisation of the net asset value of the home and foreign companies' assets to provide security for debt financing.

The important findings of the section dealing with problems areas in the process of considering making capital investments abroad, in a declining order of the number of responses received, is stated, followed by possible solutions for each respective problem.

- Restrictions placed on the cross-border movement of capital between the home and foreign countries.
    - Establish and maintain good relations with the governments of the home and foreign country, in order to secure agreements with them.
    - Generate cash flows within the foreign market, and avoid adding additional capital from the home company.
    - Operate within laws and legislation, but employ laws and its loopholes to get the desired effects.
- Escalation in costs, eroding profits and cash flows.
    - Employ effective cost management by finding innovative ways to reduce costs.
    - Seek capital and cost synergies by doing things collectively with a number of other companies.
- Managing and hedging foreign exchange rate risks.
    - Hedge foreign exchange rate risks by purchasing hedging options and contracts, or setting operations up in a way that it hedged the type of business.
    - Use finance available in the foreign market.
- Lack of reliable information regarding the economic environment of the foreign country.
    - Obtain information themselves by entering into the market, or creating a small office.

  - Doing research prior to entering the foreign market, by purchasing from third parties, or sending a research team.
- Lack of financing availability in the foreign country
  - Supply financing from the home country.
- Unavailability of enough labourers in the foreign market.
  - Use expatriates depending on the type of labour needed.
  - Train individuals from the foreign country within the home country.

The four considerations that need to be changed most frequently in order to be in line with the needs and practices of the foreign country and companies are as follows:

- The liquidity or cash holdings of the home and foreign company.
- The cost structure of the company with respect to operating leverage.
- The solvency needs of the home and foreign company.
- Use of equity and/or debt to achieve the target capital structure to achieve an acceptable level of profitability.

8.6 Conclusions

The primary objective of the study has been to improve financial decision-making by South African companies concerning the investment of capital abroad. In order to achieve this objective, a number of secondary objectives had to be met. The empirical opinion survey was employed as it was decided that it was an appropriate tool to use for this purposes. The questionnaire was set out in a manner, and included a number of sections, in order to meet these objectives. This was done not only to meet the stated objectives, but also to get a full view of the most important considerations involved when making capital investments abroad.

The first findings of the study have shown that the group of factors covering financial ratio analysis considerations as a group were found to be the most important factors when considering making capital investments abroad. This group included the profitability, cash flow, liquidity and solvency considerations. This was followed closely by the taxation of the foreign country. A number of other taxation considerations were placed in the 16 most important financial considerations. This included the event of double taxation, the use of unilateral relief agreements, taxation of the home country, and lastly the response to tax incentives offered by countries.

Another set of considerations found in the top 16 financial consideration centred around the capital structure of the company. This included the existing and planned capital structure, the realisation of net asset value of assets for security and the availability of foreign financing between the home and foreign country.

The problem area mentioned by the majority of respondents was the restrictions placed on the cross-border movement of capital. This was followed by escalation in costs eroding profits and cash flows, managing and hedging foreign exchange rate risks, the lack of reliable information regarding the economic environment of the foreign country, the lack of financing available in the foreign country, and also the unavailability of enough labourers in the foreign market. There were a number of solutions that were found to these problems that may provide benefits and insight to companies in an number of ways. Furthermore it was also learnt that a number of factors such as the liquidity, cost structure and solvency should frequently be changed in order to stay in line with the needs and practices of the foreign country.

The findings of the chapter are based on the empirical study and were done in order to meet the primary and secondary objectives of the study itself. The findings of the empirical study should be beneficial to companies who are in the process of considering making capital investments abroad.

CHAPTER 9

RESULTS OF THE SENSITIVITY ANALYSIS

9.1 Introduction

The results of this chapter are based on the theoretical discussion in Chapter 7 concerning the sensitivity analysis. The questionnaire employed for this study was aimed at exploring the perceptions of the respondents. This was done specifically with regard to factors that were found to be important in the literature review for this study. The first few sections of the empirical study explored these perceptions with the use of a Likert scale, in the attempt to obtain the information that would allow for the primary and secondary objectives of the study to be met. The final objective of the study was to analyse various bases according to which the sensitivity of the determining factors could be viewed. The current section of the study is therefore aimed exclusively at reaching this objective.

The last section of the questionnaire asked respondents for various statistics and information regarding their company. It was assumed that the individuals being interviewed would be in possession of the required information on account of the rank or position that they held. The required information concerned the turnover of the company, total assets of the company, total (including also temporary staff) and permanent number of employees, the average duration of the capital investments, the number of years of experience in making capital investments abroad, and, lastly, the capital intensity. The capital intensity of each company was calculated by dividing the total assets of the company by the number of permanent employees.

This information would be used to run regression analysis in analysing the relationship between the various factors in a number of tests. There naturally were a number of other factors that could have been included, although it was decided that the factors that were included could represent many of the actual factors that needed to be analysed. The actual analysis and regressions were done with help from the Centre for Statistical Analysis at Stellenbosch University. It was decided to consult them, as they were in a suitable position to provide guidance on the matter. The

programme used during this analysis was Statistica ®, as they found it most suitable for the purposes of this study.

The sections that follow present the results and key indicators of the various regressions that were run. This is followed by a brief commentary and discussion of the results that were obtained. It is set up in this way so that the actual results are presented, and the brief explanation should provide more insight into the results. It should be noted that explaining the statistical concepts is outside the realm of the study. The meaning of the results and some basic background information will, however, be discussed.

9.2 Statistical analysis

The first use of the performed statistical analysis was to calculate the coefficient of correlation between the relevant factors. Berenson, Levine and Krehbiel (2004:119) stated that the coefficient of correlation measures the strength of a relationship, or the association between two variables whose values range from –1 for a perfectly negative correlation up to +1 for a perfect positive correlation. The following section presents, and then discusses the correlations found when calculated between total assets, turnover, total number of employees, number of permanent employees, experience in number of years of making capital investments abroad and, lastly, the average duration of those investments. The table of results is presented first, followed by a brief discussion of the various results.

Table 9.1 Correlation coefficients between Variable 1 and Variable 2.

	Column 1	Column 2	Column 3	Column 4
	Variable 1	**Variable 2**	**Spearman correlation coefficients**	**p-values associated with the correlation coefficients**
1	Turnover	Total number of employees	0.5	<0.01
2	Turnover	Permanent employees	0.53	<0.01
3	Turnover	Total assets	0.74	<0.01
4	Turnover	Experience in number of years	0.12	0.53
5	Turnover	Average duration	0.27	0.14
6	Turnover	Capital intensity	0.56	0.01
7	Total number of employees	Permanent employees	0.84	<0.01
8	Total number of employees	Total assets	0.37	0.04
9	Total number of employees	Experience in number of years	0.31	0.09
10	Total number of employees	Average duration	0.19	0.30
11	Total number of employees	Capital intensity	–0.06	0.77
12	Permanent employees	Total assets	0.39	0.03
13	Permanent employees	Experience in number of years	0.11	0.58
14	Permanent employees	Average duration	0.27	0.16
15	Permanent employees	Capital intensity	–0.1	0.6
16	Total assets	Experience in number of years	–0.07	0.71
17	Total assets	Average duration	0.43	0.02
18	Total assets	Capital intensity	0.84	<0.01
19	Experience in number of years	Average duration	0.34	0.07
20	Experience in number of years	Capital intensity	–0.03	0.87
21	Average duration	Capital intensity	0.34	0.07

The preceding table shows the results of the correlations between the various factors when calculated against each other. Column 1 and Column 2 show which factors' correlations are being calculated. Column 3 to Column 4 show the correlations calculated with the use of the

Spearman coefficient techniques. The Spearman coefficient is non-parametric, and thus is robust with regard to outliers. It was decided on advice from the Centre for Statistical Analysis at Stellenbosch University that the Spearman coefficient would be beneficial for the purposes of the research. The coefficient ranks between –1 and +1, with –1 signifying a perfect negative correlation, +1 being a perfectly positive correlation and 0 being no correlation at all. Gujarati (2003:137) stated that the p-value is also known as the statistical value. He further stated that the p-value is the lowest significant value at which a null hypothesis can be rejected. The null hypothesis states that there is no correlation between the variables. It basically means that the lower the p-value, the more you are in a position to reject the hypothesis of no correlation. It must be noted that all correlations and regressions are reported using a 5% confidence level. Thus, statistically meaningful conclusions are derived from any p-value below 5%, although trends could also be noted if the p-value falls just outside of the 5% region.

The table presents the results obtained when the correlations between the various factors were calculated. There are a few results in Table 9.1 above, where meaningful relationships are derived between the factors. By meaningful it is meant that the conclusions are statistically significant. The first relationship that may be seen from the table above is that between turnover and total number of employees. The correlation between the factors is 0.5, which shows that there is a significantly positive relationship between the factors. The same is observed between turnover and permanent employees, as the correlation is 0.53. It can be seen that the relationships are very similar to one another, which should be expected as they are different measures of the same aspect. The relationship between turnover and total assets is 0.74, which shows a strong positive relationship in the movements between the factors. This is logical as a company may only expand and purchase assets if they have the turnover to do so. A positive correlation has also been found between turnover and capital intensity. This was anticipated as capital intensity has been calculated using the total assets and number of permanent employees of a company, both of which have been found to have a positive relationship with the turnover of a company.

Total number of employees and permanent employees has also been found to have a relationship with total assets. The correlation between the former pair being 0.37, and the latter pair being 0.39. This shows that there is a medium positive correlation between them. Another similar correlation of 0.43 was reported between total assets and average duration of the investments.

This is encouraging as it shows companies with larger asset bases tend to hold their foreign investments for longer periods. Total assets have also been found to have a strong relationship with the capital intensity of a company, but once again this was expected, as total assets were included in the calculation of capital intensity. It was however found that permanent employees and capital intensity do not have any statistically significance relationship.

There is a very strong relationship between total number of employees and permanent employees. The correlations between the factors are shown to be 0.84, which could be expected, as these are very similar factors, in the sense that they measure different versions of the same factor. The average duration of the investments, lastly, has also been found to have a correlation with the experience in number of years as well as capital intensity. The level of significance is slightly outside the acceptable level, while the correlation for both is 0.34. It can be deduced from this that, although there is not a very strong relationship between the factors, there may be a trend between them.

The correlations between the other factors have not been commented on because they fell outside the acceptable level of significance. Although they may have shown some meaningful relationships with each other, they may not be reported as statistically reliable due to the level of significance. It could also be seen that none of the above factors have any negative relationship with each other, showing that larger companies tend to be more successful, and should be in a better financial position when undertaking capital investments abroad.

9.3 Regression analysis

Regression analyses were performed in order to explore not only the relationships between the factors, but also the effect that changes in the factors bring about regarding each other. Gujarati (2003:18 & 31) has stated that regression analysis is concerned with the study of the statistical dependence of one variable, the dependant variable, on one or more other variables, the explanatory variables, with a view to estimating and/or predicting the (population) mean or average value of the former in terms of the known or fixed value of the latter. From the above definitions it should be clear that the aim of regression analysis is to estimate changes and levels of dependence between variables. This study will be making use of multiple regression analysis, as the number of independent variables exceeds one. A number of key indicators are used when discussing the results of such regressions. These indicators will be presented as part of the results

of all regressions run. As it is important to state which ones will be used, a brief explanation of them is provided.

The first indicator that will be assessed is the R^2 value. Gujarati (2003:84 & 213) called it the coefficient of determination. He stated that it is a measure of the goodness of the fit of a regression line, or that it measures the proportion or percentage of the total variation in the dependant variable explained by the regression model. More simply put, it is a measure of the degree of association between the dependent variable and all the independent variables in the equation. It is usually between zero and one; where in some cases it is found to be a negative, it will always be taken as positive.

The next term to be used is the β or beta term. This term is also known as the regression coefficients of the standardised variables, or the standardised beta coefficient. A beta coefficient is estimated for all factors in the model, and it helps to understand the effect which changes in variables have. Beta is the amount of change that will be brought about in the variable it is measuring, for any increase of a unit in the independent variable. Other factors such as the standard error of beta, and the t-statistic have also been included. They have been included as a point of reference as they are required in order to calculate the p-value.

The p-value is the last factor in the table which will be interpreted. It has been discussed above for the correlation coefficients of the various factors. It must also be noted once again that a 5% confidence interval will be employed when interpreting the results of the sensitivity analysis.

The factors that will be employed in the following sections are the same as those used when calculating the correlations. The regression equations were run by swapping around all factors for the various estimates. Thus, each factor that was used had a chance to be the dependent variable. In total, seven sets of regression equations will be discussed. All factors used in the chapter have not been included in all regressions run. It was once again on advice from the Centre for Statistical Consultation, that it would be incorrect to include the total number of employees and number of permanent employees in any given regression, due to the fact that they are very highly correlated. Furthermore capital intensity and total assets were also not included together in all regressions, although these differ according to the dependent variable being

calculated. The regressions will first be introduced and it will then be followed by a discussion of each of them.

9.3.1 Experience in number of years of capital investments abroad

Table 9.2 presents the summary of the statistics of the results obtained from the regression equation when using the experience in number of years concerning capital investments abroad as the dependent variable. All factors except the number of permanent employees, as explained above, have been included in this equation as independent variables.

Table 9.2 Summary of the statistics regarding the regression equation when using the experience in number of years of capital investments abroad as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Turnover	0.04	0.25	0.16	0.87
Total number of employees	0.46	0.23	2.02	0.06
Total assets	-0.08	0.27	-0.29	0.78
Average duration	-0.01	0.20	-0.04	0.97
Capital intensity	-0.12	0.24	-0.5	0.62
R^2= 0.25				

The first term that requires commentary is the R^2 value of the above regression, which is 25%. This tells that roughly 25% of the variance is explained by the independent variables in the equation. This may seem very low, but could be expected as there is a large number of external factors that are not measured. This can also be observed from the fact that only five independent variables were included, while there were numerous others that could have an impact. Adding terms to the equation could, of course, increase the value, although that was not the aim of the study. It can be seen from the above table that none of the independent variables has shown a significant impact on the experience in number of years. The total number of employees may have had an impact on the dependent variable as it is just outside the 5% level of significance; however, it is outside and thus no meaningful impact could have been found from this regression.

9.3.2 Average duration in years of capital investments abroad

Table 9.3 presents the summary of the statistics of the results obtained from the regression equation when using average duration in number of years of capital investments abroad as the dependent variable. All factors except the number of permanent employees, as explained above, have been included in this equation as independent variables.

Table 9.3 Summary of the statistics regarding the regression equation when using the average duration in years of capital investments abroad as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Turnover	0.21	0.25	0.83	0.41
Total number of employees	0.10	0.25	0.41	0.68
Total assets	0.35	0.26	1.35	0.19
Experience in number of years	-0.01	0.21	-0.04	0.97
Capital intensity	-0.20	0.24	-0.84	0.41
R^2= 0.22				

The above regression equation estimates the relationship between the average duration in years of the capital investments abroad, using all five factors as the independent variables. This time the R^2 value term this regression is 22%. Thus the independent variables explain only 22% of the variance in the dependent variable. This value is very low, although it has been stated above that low values can be expected as there is a large number of external factors that were not measured. This is reinforced by the fact that none of the independent variables have any significant relationship with the dependent variable. It can thus be concluded from the above results that no statistically significant conclusions can be derived from the above table.

9.3.3 Turnover

Table 9.4 presents the summary of the statistics of the results obtained from the regression equation when using turnover as the dependent variable. All factors except the number of permanent employees, as explained above, have been included in this equation as independent variables.

Table 9.4 Summary of the statistics regarding the regression equation when using turnover as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Total number of employees	0.48	0.18	2.63	0.01
Total assets	0.28	0.21	1.29	0.21
Experience in number of years	0.03	0.17	0.16	0.87
Average duration	0.14	0.16	0.83	0.41
Capital intensity	0.03	0.20	0.16	0.88
R^2= 0.49				

The above regression equation estimates the relationship between turnover and five factors that have been included in the chapter. The R^2 value for the above equation is high in comparison with the previous equations. The value indicates that 49% of the variance in turnover can be explained by the factors included in this study.

There is one independent variable in the above regression equation that does have a statistically significant relationship with turnover. The total number of employees was found to have a p-value of 0.01 in the equation. The beta coefficient of 0.48 in this relationship shows that a 1% increase in the total number of employees of the company brings about a 0.48% increase in the turnover of the company. This is consistent with the 0.5 positive correlation found between the two variables in Table 9.1. The reason could be explained by the fact that an increase in employees could increase the capacity and output of the company.

9.3.4 Total assets

The following table presents the summary of statistics from the results obtained from the regression equation when using total assets as the dependent variable. All factors except the number of permanent employees and capital intensity, as explained above, have been included in this equation as independent variables.

Table 9.5 Summary of the statistics regarding the regression equation when using the total assets as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Turnover	0.42	0.22	1.91	0.07
Total number of employees	0.02	0.24	0.07	0.94
Experience in number of years	-0.16	0.19	-0.81	0.43
Average duration	0.20	0.19	1.06	0.30
R^2= 0.28				

The above regression equation estimates the relationship between total assets as the dependent variable, and the independent variables included in this section. The R^2 value for the above equation is 0.28. This shows that 28% of the variance in total assets is explained by the independent variables used in the equation. This may be acceptable once again as a large number of external factors was not measured. The four independent variables are statistically not significant, however. They are therefore not reliable predictors of the total assets of a company. Once again an independent variable is found just outside of the level of significance; it is rejected, however.

9.3.5 Total number of employees

Table 9.6 presents a summary of the statistics of the results obtained from the regression equation when using total number of employees as the dependent variable. All factors except the number of permanent employees, as explained above, have been included in this equation as independent variables.

Table 9.6 Summary of the statistics regarding the regression equation when using the total number of employees as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Turnover	0.47	0.18	2.64	0.01
Total assets	0.12	0.22	0.57	0.58
Experience in number of years	0.31	0.15	2.02	0.06
Average duration	0.07	0.16	0.41	0.68
Capital intensity	-0.16	0.20	-0.81	0.42
R^2= 0.50				

The above regression equation estimates the relationship between total number of employees and the other independent variables used in this section. The R^2 value for the above equation is 0.5, meaning that 50% of the variance in total number of employees can be explained by the independent variables within the equation. As stated previously, this is low, but is an acceptable value as there are many outside variables that affect the dependent variable that have not been included in this analysis. It can be seen that one of the independent variables is statistically significant at the 5% confidence level. The variable with a p-value of 0.01 is the turnover of the company. The beta for this term is 0.47, showing that a 1% change in turnover brings about a 0.47% change in the total number of employees. This is consistent with the results found in the equation using turnover as the dependent variable. This is logical, because when a company's turnover increases it could perhaps be assumed that the company may be expanding in capacity and sales; this requires more staff to manage and maintain the operations of the company. The experience in number of years has been found to have a p-value just outside of the 5% confidence level used; this, however, as said before, is still outside of the region and statistical conclusions can still not be derived therefrom.

9.3.6 Number of permanent employees

Table 9.7 presents the summary of statistics from the results obtained from the regression equation when using number of permanent employees as the dependent variable. All factors except the total number of employees, the total assets and capital intensity, as explained above, have been included in this equation as independent variables.

Table 9.7 Summary of the statistics regarding the regression equation when using the number of permanent employees as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Turnover	0.53	0.16	3.33	<0.01
Experience in number of years	0.22	0.15	1.52	0.14
Average duration	0.15	0.15	1.01	0.32
R^2= 0.48				

The R^2 value for this equation was 0.48. Interpreted, it says that 48% of the variance in the number of permanent employees is explained by the independent variables in the equation. This is fairly high, keeping in mind that a number of outside factors that may have had an influence was not included in the analysis. This is very similar to the R^2 value obtained for the equation estimating the total number of employees. This R^2 value is very similar between the two regression estimates, even though the previous equation consisted of more variables. From the equation it can be observed that only one of the standardised beta terms is statistically significant. Turnover has a p-value of less than 0.01, which is well below the 5% level of significance chosen for the study. This indicates that turnover and the number of permanent employees have a positive correlation with each other. A 1% increase in turnover will bring about a 0.53 % change in the number of permanent employees. Other than the relationship between turnover and the number of permanent employees, there are no other meaningful statistical relationships to report.

9.3.7 Capital intensity

Table 9.8 presents the summary of statistics from the results obtained from the regression equation when using capital intensity as the dependent variable. All factors except the number of permanent employees and total assets, as explained above, have been included in this equation as independent variables.

Table 9.8 Summary of the statistics regarding the regression equation when using the capital intensity as the dependent variable

Independent variables	Standardised beta	Standard error of beta	t-statistic	p-value
Turnover	0.33	0.25	1.34	0.19
Total number of employees	-0.16	0.26	-0.60	0.56
Experience in number of years	-0.20	0.21	-0.91	0.37
Average duration	-0.00	0.21	-0.01	1
R^2= 0.10				

The R^2 value for this equation has been found as 0.1, or interpreted as that 10% of the variance in permanent employees is explained by the independent variables in the equation. This result is very low, even when keeping in mind that a number of outside factors that may have had an influence were not included in the analysis. This shows that these independent variables do very little to explain impacts and changes that would occur in the dependent variable. The lack of results is supported by the fact there are no statistically significant independent variables in the equation.

9.4 Conclusions

The chapter has covered the regression analysis of a number of factors that were discussed in Chapter 7. The aim of the regression analysis was to analyse the sensitivity of the determining factors. This was one of the objectives set at the inception of the study. They were deemed to be the most valuable factors and offer the most insight into the aspects that need be considered when making investments abroad.

The first reason for the usefulness of the sensitivity analysis is that it shows a number of relationships between factors and their sensitivity to one another. This has also been proven by the fact that the p-value helps to distinguish between factors that are statistically significant, those that have trends with each other, and those that have no statistical significance whatsoever. The first relationship that was found to be at the 5% level of significance is the relationship between turnover as the dependent variable and the total number of employees. The same result was found in the equation where turnover was used as the independent variable, and the total number of employees as the dependent variable. In the first equation, a standardised beta

coefficient of around 0.48 was found in the first instance and a beta coefficient of 0.47 in the second. This result may have been expected, as an increase in employees could allow the company to increase its productivity and capacity, and, as result, its turnover. An increase in turnover on the other hand could allow a company to employ more employees as it could have the available funding.

The second significant relationship that was found, is between the number of permanent employees as the dependent variable and turnover as the independent variable. The same explanation as for the above relationship between turnover and total number of employees should apply to this relationship. This is due to the fact that total number of employees and the number of permanent employees are different versions of the same factor. No other statistically significant relationships were to be found between any other variables.

It is possible to conclude from the results of the R^2 values that the independent variables explain between 10% and 50% of the variance of the various equations. It was a fairly good ratio in most cases as only a few factors were applied in this chapter.

CHAPTER 10

MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

10.1 Introduction

The primary and secondary objectives of this research were as follows:

The primary objective of this study is embodied in an explanatory study and should improve financial decision-making by South African companies concerned with the investment of capital abroad.

The necessary secondary objectives to achieve the primary objective include the following aspects:

- To consider and discuss the tax implications that South African and foreign legislation have for a South African company making capital investments abroad.
- To evaluate the role that the interest rate, foreign exchange rate and inflation rate play in the decision to invest capital abroad.
- To take into account the capital structure, the cost of capital, operating and financial leverage considerations and the extent to which these have an influence on the decision-making process.
- To focus on the financial performance of domestic companies and the financial results that can be achieved abroad, focusing on the cash flow, liquidity, solvency and profitability of companies.
- To undertake a comprehensive empirical study, which focuses on the largest companies in South Africa to obtain their perceptions concerning capital investments abroad.
- To analyse the sensitivity of the determining factors that can be viewed, for example the size of the companies, the labour and capital intensity of the enterprises, and whether the companies have experience of capital investment abroad or not

- To provide recommendations which should be valuable to small and large enterprises when they are considering capital investments abroad, based on the perceptions of the leading companies in South Africa.

The remaining part of this chapter embodies the main findings of the research, the main conclusions derived from the findings, the recommendations made, as well as the limitations of this study and areas for future research.

10.2 Main findings

The next section provides a brief summary of the main findings of the study as a whole. This will be broken down to the main findings of the literature study, followed then by the main findings of the empirical study.

10.2.1 Main finding of the literature review

The main findings of the literature review are as follows:

10.2.1.1 Chapter 2: Aspects and implications of taxation

- Multinational taxation is an important factor to consider, as it involves not only domestic taxation legislation, but also the taxation legislation of the foreign company. This gives rise to many other factors, compared to when dealing only with domestic taxation.
- The relationship between the taxation legislation of the home country and of the foreign country needs to be studied in an attempt to minimise and avoid the occurrence of double taxation as far as possible. All approved and pending agreements, as well as subscriptions to outside body agreements need to be included in this study.
- There are various forms of tax avoidance and reduction techniques. Avoidance and reduction can be achieved through transfer pricing, thin capitalisation and the establishment of investments in international tax havens.
- The availability of the various tax incentives, such as tax exemptions, deductions from the taxable base, and tax deferral may incline companies toward a particular investment and a country.
- Tax competition between countries in an attempt to attract companies to invest within a particular country may prove useful for companies in the process of considering making capital investments abroad.

10.2.1.2 Chapter 3: Inflation rate, interest rate and foreign exchange rate considerations

- These rates are highly important, individually and collectively, as they play a role in the determination of one another. It is highly important that they are not viewed in isolation, but in cross-country comparison.
- Inflation does not only affect the relative price level of a country, but also has a relationship with the economic stability of the country. It also has a key relationship with the economic growth, cost of capital and company profit.
- Foreign exchange rate movements have the ability to turn a profitable investment undertaking into a highly unprofitable opportunity. Foreign exchange rates also have an effect on foreign direct investment, as it affects any cross-border movement of capital, including the initial investment outlay, profit and dividend repatriation, and all purchases of assets and loans received.
- Interest rates have an influence over a number of financial characteristics, including the cost of capital, the returns to be expected and benchmarking of projects. It also, according to some financial theories, plays a large role in the determination of foreign exchange rates.

10.2.1.3 Chapter 4: Capital structure and the cost of capital

- The cost of capital is one of the main determinants in the formation of the capital structure of a company.
- The weighted average cost of capital (WACC) is the appropriate measure of the cost of capital as it encompasses the entire capital structure. This is the benchmark that all investment opportunities and their expected returns will be measured against.
- The capital and labour intensities of a company play a key role in the determination of the operating leverage. These sensitivities may also cause changes in the financial leverage of the company due to changes in the amount of debt capital used, and ultimately affect the capital structure.
- Two important sources of risk to be considered are the levels of financial risk and business risk.

- All factors mentioned in this chapter have strong relationships with each other that cannot be viewed in isolation. They cause changes and each one play a role in the determination of the others.

10.2.1.4 Chapter 5: Cash flow, liquidity, solvency and profitability

- These ratios have the ability to summarise the feasibility of an entire business venture or company. They are the most important factors in any business undertaking.
- Profitability is one of the primary reason for any business undertaking. The profitability ratios measure the financial performance of a company.
- Cash flow is the realisation of profits into cash inflows for the company. The cash flow statement is central to the analysis of cash flows, and helps to ensure that the company has sufficient financial resources to survive and prosper.
- Liquidity concerns the short-term ability of the company to meet its obligations. Liquidity management is needed for the healthy functioning of a company. The cash flow is a direct contributor to the liquidity ratios and levels of the company.
- Solvency concerns the long-term ability of the company to meet its obligations. This differs from liquidity as it does not involve the current cash position of the company only, but also the prospective amount that could be recouped in the event that the company is liquidated.

10.2.1.5 Chapter 6: Sensitivity analysis

- This is the last step in the process of analysing company factors or characteristics. It is used to measure the sensitivity of the chosen factors to changes in each other.
- The factors chosen for this particular section are deemed to be the most important factors to be considered when in the process of considering making capital investments abroad.
- The regression analysis that is used measures the changes in the sensitivity to factors appropriately when changes in each factor occur.
- The quality of the data obtained will be determined by the quality of the inputs provided by the respective participants.

10.2.2 Main findings of the empirical study

The main findings of the empirical study are as follows:

- The financial ratio considerations are the most important factors when considering making capital investments abroad.
- Profitability is by far the most important financial consideration, although followed closely by cash flow, liquidity and solvency.
- Taxation plays a large role in the investment decision. The main factors that need to be considered are the taxation in the foreign country and the occurrence of double taxation.
- Tax incentives play varying roles in the likelihood of inducing foreign direct investment, although they are not of significant importance in most instances.
- International tax havens are of little to no importance and will not affect a company's decision to invest.
- Future growth of the home and foreign company is an extremely important factor in the decision to invest. It has the ability to induce foreign investment on its own.
- Large companies, such as those used in the sample of this study, are highly concerned with future growth, but especially over the long term. They seek opportunities that will be sustainable over the long run, especially in the event that growth possibilities in the home country have lessened. They will first seek opportunities locally before they search abroad.
- The availability of debt capital and its contributing factors are crucial. Companies place more emphasis on the use of debt capital, and want to ensure that country and foreign company characteristics are in line to provide for those needs.
- The capital structure is of high importance, and must be looked at in conjunction with its contributing factors. Companies must do research on whether the country has the required resources available to provide the debt needed, and whether or not the company has the capacity to undertake additional debt.
- Operating leverage is of little consequence to companies, this also goes for other factors such as labour and capital intensities. This being said, it was found that the capital intensity requires more attention than does the labour intensity.

- The economic conditions and climate of the country are of little importance. They are neither a problem, nor are viewed as having much benefit to companies.
- The foreign exchange rate consideration is the only economic factor that has been given importance. It is a key consideration as it affects any movement of currency between countries. It is also a serious problem, but different companies use different forms of hedging to counteract this problem.
- Limitations placed on the cross-border movement of capital between countries are an enormous problem when considering undertaking foreign capital investments. The effects will differ according to the degree of the limitation placed on investment, the worst case being total limitation that could prevent the investment completely.
- Companies are highly concerned with the lack of reliable information regarding the foreign country and company. This could leave them in a position where they have incorrect or not enough information. There are a number of ways whereby it may be possible to remedy this problem.
- Companies are more likely to extend the lifespan of a planned capital investment abroad than they are likely to shorten the lifespan of the investment abroad. This also may show that they have more successes than failures where existing ventures are concerned.

10.2.3 Main findings of the chapter dealing with the sensitivity analysis.

The main findings of the section dealing with the sensitivity analysis are as follows:

- Correlation and regression analyses provide valuable information concerning the statistical relationships between various factors that cannot be obtained through other forms of analysis.
- A number of correlations were shown between factors such as turnover, total assets; total and permanent employees that have statistically significant correlations with some factors.
- There is a positive relationship between turnover and the total number of employees, and also between turnover and the number of permanent employees. This has been proven through the coefficients of correlation and statistically significant regression coefficients calculated. A 5% confidence interval was applied.

- Between 10% and 50% of the variances in the regression equations have been explained by the factors chosen in the sensitivity analysis. This shows that a number of outside factors need to be included in order to explain the remaining factors.

10.3 Main conclusions

A number of important conclusions were drawn from the study. It is important to correctly state the main points or findings derived from this study at this point. These are the findings on which the study as a whole will be judged as to whether or not it has met the stated objectives. Once these findings are clearly stated, the recommendations arising from the study will be made. These recommendations will be discussed in the section to follow.

The main finding of the study is that considerations involving *financial ratio analysis* are the most important factors to consider making capital investments abroad. The factor itself includes profitability, cash flow, liquidity and solvency considerations. That *profitability* is the single most important factor is proven without doubt to be of prime importance to any business venture. Other contributing factors that have been found are the *future growth* of the home and foreign company. This factor actually causes companies to actively seek investment opportunities, first locally and then abroad, and it may be one of the factors that lead a company to actively seek foreign investment opportunities.

There is a much larger number of negative factors that may drive a company to avoid undertaking a foreign investment. One of the largest factors that companies are concerned with is *taxation*. They are concerned with domestic taxation, but the biggest issue lies in taxation of the foreign country and also the occurrence of double taxation. The positive factors involved with taxation such as tax incentives and the use of international tax havens are of little consequence. Companies are rather concerned with factors such as the *availability of foreign financing* and the possibility of the company to obtain additional debt capital. Companies are more concerned with debt capital and the use thereof than of any other source of financing. This builds up to the fact that the prevailing *capital structure* and the planned capital structure play an important role. Although the *financial and operating leverage considerations* contribute to the capital structure of the company, it has far less impact and weighting on the investment decision. It was also found that *capital intensity* plays a larger role than labour intensity. This is logical, as the capital

intensity requires larger outlays of capital, and involves a financial decision with a long-term impact.

The *economic indicators or climate* of the country have little influence over a company's investment decisions. The *interest rate* is only of consequence where the consideration of the amount of debt capital to be used is concerned. The *inflation rate* does not seem to be a big issue, although it affects different companies in different ways. The *foreign exchange rate* consideration, on the other hand, is highly influential. It is considered to be highly important and at the same time may be a considerable problem as it affects any cross-border movement of capital. Another concern when moving capital is whether *restrictions* may be placed on the cross-border movement of capital. This was found to be the biggest problem area, especially as it has the potential to prevent the investment from taking place altogether. Another concern is that of a *lack of reliable information* regarding the foreign country and environment. This is crucial as a company may find itself in a position where it has to make a decision regarding the investment, on the strength of imperfect information.

In addition to the above-mentioned findings, a number of findings were derived from the sensitivity analysis. It was found that, as the turnover of a company increase, its total number of employees will grow, and vice versa. Statistically significant relationships were also found between turnover and the number of permanent employees. The main conclusion here is that the factors are interlinked, and a change in one factor may produce changes in the other factors.

The findings mentioned above are the main findings that relate to the objectives that were set out for the study. It was possible to draw further conclusions from the literature review and the empirical study; however these are the most important. The secondary objectives were aimed at discussion and exploration as they were designed to build up to the primary objective of providing companies with information that would help them when in the process of considering making capital investments abroad.

10.4 Recommendations

The primary objective of the study was to conduct an explanatory study that should improve financial decision-making by South African companies concerning the investment of capital abroad. The largest companies in South Africa were used as the research sample because they are

the most likely to be making capital investments abroad and as the *leading companies* should serve as an illustration for other enterprises. It does not mean that companies which are smaller in size cannot benefit from the research results. The recommendations could be used by any enterprise considering capital investments abroad.

The first recommendation that can be made according to the results of the study is that companies should assess any opportunity that is available to them. They should carry out the assessment according to those factors that were found to be most important in this study. These *company-specific factors* involve the profitability, cash flow, liquidity and solvency of the company or project.

The *profitability* is the first and most important factor of the investment opportunity as it is the main reason for undertaking any business venture. The most important aspect when considering profitability is that the expected returns must exceed the cost of financing. This should be compared to the expected returns available for similar opportunities in the home country, as seeking foreign opportunities may not be feasible if similar returns are available in the home country. The *cash flow* of the company should then be analysed, as different countries follow different norms and practices. It is in any company's best interest to analyse the cash flow situation, as high levels of profitability will not be beneficial if companies are unable to realise cash inflows from the profitability. They should analyse the timing and manner in which cash flows can be expected and paid. This should help them to structure their payments in line with the maximum time allowed for payment, receive cash inflows in the shortest time possible and then plan their liquidity needs effectively. Lack of cash flow may give rise to *liquidity and solvency* problems, thus it is important that they are considered in collaboration with each other. These factors should be contemplated, so that companies may decide whether or not there are sufficient benefits to derive from undertaking a particular opportunity, and whether or not it is beneficial to carry out further analysis.

The second recommendation regarding company characteristics is that companies should look further than the financial factors of the company only. They should consider the long-term future *growth prospects* of the opportunity itself. An investment may be profitable in the short term, but it must have growth possibilities that are sustainable in the future. It is not in the best interest of the company to look only into the short-term benefits, as the time and resources spent to put the

investment in place may go to waste. These considerations, as well as the financial characteristics are the most influential factors to consider in any company. Thus, if these are not positively evaluated there may be no reason to investigate the situation any further.

The next recommendation is that companies considering capital investments abroad should consider the *country-specific considerations*. The first country-specific consideration that should be contemplated is whether there are any *limitations on the cross-border movement of capital*. This should be the first as it has the ability to prevent the investment from taking place altogether. The company should then explore the *taxation* legislation of the foreign country and the domestic country as well, as to the relationship between the legislation that governs the respective countries. This is important because taxation has the ability to turn a highly profitable investment into a loss or liability.

The company furthermore should consider the *availability of reliable information* regarding the economic environment of the foreign country. These country-specific factors should be considered as they are the factors that could prevent investment in a foreign country and also destroy the feasibility of a capital investment altogether. Among the country-specific characteristics that should be explored, are the *economic indicators* such as the interest rate, inflation rate and foreign exchange rate considerations. The main consideration that should be explored at this stage would be the interest rate consideration as it would affect the availability and attractiveness of debt financing within the foreign country. The foreign exchange rate should also be explored in terms of its volatility and because of the relationship it has with the domestic country. Furthermore, they should research the availability of hedging instruments, as many respondents have expressed concern regarding the lack of foreign exchange hedging instruments in Africa. Emphasis should also be placed on the inflation rate, through comparing the rates in the home and host countries.

It is also recommended that the South African companies should consider the needs of the foreign company in light of the company's *operating leverage*. It is necessary to ensure that the capital and labour inputs are available when needed. In addition to this, they should also determine whether there is existing legislation governing *profit shifting* to South Africa. Companies should also ascertain whether the foreign government would offer them tax incentives, and also what the terms according to which they would be offered would be.

The company- and country-specific factors have been mentioned separately; however, they should also be considered in *conjunction* with each other. This will take place simultaneously in most cases, as they are not separate processes. An important recommendation for companies is that they should *compare* all factors that affect both the home and the host countries. It will be helpful to consider whether there are large enough gains or advantages that could be attained from entering a foreign market because the rationale behind foreign investment is that companies enter foreign markets because the benefits of such ventures exceed the benefits of operating in the domestic market only.

10.5 Limitations

The limitations of this study should be stated to provide balance to the study and also indicate possible areas where the literature and methodology of the study may have fallen short. They may not be obvious on first viewing the study, although, once carefully viewed, they may become more visible. This study has limitations without which the study could have been improved and, as a result, also the findings.

The first limitation of the study could be identified as the *number of companies* that were included in the sample. This study focused on the top 50 companies in South Africa, and interviewed 30 of them. The sample could have incorporated a larger number of companies and at the same time arranged a larger number of interviews. This was however not possible as the method chosen to conduct the research would not allow for larger numbers. It would have increased costs as other companies outside of Johannesburg and Cape Town would have had to be included. The costs would have been the biggest factor because personal interviews require much planning as permission has to be obtained and appointments arranged. To save costs, the mailed questionnaire could have replaced the personal interview for the sake of obtaining a larger numbers of participants. This, however, would have lowered the quality of the information that was obtained considerably, while there would also have been a loss of the additional input from companies that could only be obtained from personal interviews. It could also have resulted in lowering the overall quality of the information obtained.

A further limitation may be traced to the suggestion that *companies of various sizes* could have been considered, the reason for this being that the considerations related to investment may differ according to the sizes of various companies. This may have allowed small- and medium-sized

companies to also benefit from the research. This being said, it does not mean that these particular companies may not benefit from the current research. It means that some consideration would have been given to the process they follow, and also to the resources and abilities they may possess. The companies included in this study have superior resources, abilities and refined processes that other companies may not possess.

Regarding the various companies, they could possibly have been divided according to *sector or industry*. The study could then have been from the point of view of a specific sector. This, however, may have caused problems as the research could have been biased toward that specific sector and the situation as experienced in the sector. Thus, it would only have benefited a select few, thereby not meeting the objectives set out at the start of the study.

The study could have included other factors outside of the financial realm as well. *Social and political aspects* could have been included as they too, have various effects on multinational investing. These affects were, as mentioned before, considered at the inception of the study. They would have been difficult to measure, although they could have proved useful as political aspects account for the legislation that affects international capital investments. The social aspects would account for common business practices and aspects that affect the specific way in which business is conducted within a particular study. This would have been difficult to measure effectively as they are associated with time lags between legislation being proposed and approved, and it also may have proved to be highly complicated.

10.6 Areas for future research

This section of the study identifies possible areas for future research that this study may have overlooked, or for which it may have opened a gap. It is important to discuss this, as no single piece of research can comprehensively cover all possible factors. A number of possible topics for future research could be extrapolated from the current study, as is the case with all other studies. This does not necessarily say that the study is incomplete and has not met its objectives. It indicates, rather, that the researcher is open to the idea that there are openings for future research.

The first suggestion for future research is that *actual financial data* from a number of companies that have made capital investments abroad could be used. This data could then be analysed and scrutinised using various statistical techniques. Such *case studies* could take all of the necessary

data variables used in the current study to investigate the relationships for each factor, bearing in mind that there are factors that may not be fully measurable. Such a study could include specific opportunities that were not undertaken by companies, thus the relationship between the various factors and the "accept or reject" decision regarding the investment opportunity could be understood.

The second area that could be investigated would involve the *inclusion of other variables, such as political and social factors*, as mentioned above. These factors would be useful as they would help to understand the impact of such factors on the process of considering making capital investments abroad. Thus, the study would focus on factors related to the foreign country that may attract investment or deter companies from investing there. The current research focused on financial characteristics of the overall investment decision. While this does not render the current study incorrect, it does suggest that it did not focus on the full array of characteristics that may apply to the country itself. The country-related factors are those that complicate the process of screening possible investment opportunities.

The third possible area of research, and definitely not the last possible area to research, is the *decision-making process* whereby companies decide to undertake foreign investments. The rationale behind this suggestion is that insight may be gained regarding the reason why companies seek opportunities internationally and not locally. This could combine an empirical questionnaire with statistical analysis. The questionnaire would help to obtain and understand the opinions of management as to why they choose to search internationally for opportunities. Statistical analysis would typically offer the opportunity to understand the company-specific conditions under which the company makes these decisions. The data for multiple companies may be used to understand the difference in timing, with regard to the financial position that companies were in when deciding to undertake the investment. Governments and local stakeholders may benefit, because they will be able to understand why companies invest in other countries. This may help them to retain the local capital within the country and also further the country's economy and business environment.

These suggestions offer possible areas for future research that are related to the current study. While other studies that are indirectly related to this study could be undertaken, the aim of this

section is to introduce possible areas for future research in relation to this study. This is also relevant to areas that the current study may not have dealt with in sufficient detail.

Appendix A.

9 September 2009

Dear Chief Executive

SURVEY ON THE PROCESS OF MAKING CAPITAL INVESTMENTS ABROAD

Chief executives play a leading role in the process of making capital investments abroad, which benefit the enterprises in particular and economic development at large. Against this background, the University of Stellenbosch is at present conducting a survey which focuses on the process of making capital investments abroad. The purpose of the study is to examine the factors which play an important role in the capital investment process, and to identify the main problem areas, as well as finding possible solutions to solve the problems.

The results of this survey should benefit executive managers of enterprises when making capital investments abroad. The results gained will also be of significant value to university students who are following courses in Financial Management and who will eventually be employed in the business environment.

Therefore, information concerning your enterprise is very important in order to understand the detail of the capital investment process. According to the recent publication of the *Financial Mail* your company is one of the top listed companies. Publicly available information of your enterprise had already been collected. We want to assure you that the information obtained in this survey will be treated as highly confidential and that it will be used in such a way that it will not be possible to identify any respondent. The research is done by Mr Adeeb Conrad for his Masters degree in Business Management, while I am the supervisor of the research.

You are therefore kindly requested to complete the attached form and return it in the self-addressed and stamped envelope, if possible before **18 September 2009**. Mr Conrad will then contact you and make an appointment to visit you, or one of your functionaries, in order to have a personal discussion on the research topic. Please accept our apologies for any inconveniences caused by this request. We do believe that the results of the survey will benefit industry, as well as university students.

Yours sincerely

Prof F J MOSTERT
Department of Business Management
University of Stellenbosch

SURVEY ON THE PROCESS OF MAKING CAPITAL INVESTMENTS ABROAD

PLEASE COMPLETE THIS FORM AND RETURN IT IN THE ENCLOSED ENVELOPE.

Name of your company:

Street address:

Name of functionary to be contacted:

Position held by functionary:

Telephone number:

Cell number:

Appendix B.

UNIVERSITY OF STELLENBOSCH
DEPARTMENT OF BUSINESS MANAGEMENT

QUESTIONNAIRE ON THE FINANCIAL CONSIDERATIONS WHEN MAKING CAPITAL INVESTMENTS ABROAD

(a) The information will be treated in the strictest confidence and in such a way that no enterprise can be identified.
(b) This questionnaire is applicable to the capital investment activities of your company.

PLEASE NOTE:

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1. Please provide the following information:

1.1 Name of your enterprise	
1.2 Name of the official who completes the questionnaire	
1.3 Position of the official who completes the questionnaire	
1.4 Your e-mail address if you want an abstract of the main findings of this survey	

2. *Please make crosses in the applicable blocks (where extremely / highly / moderately / little / not important forms a continuum) when you answer the following question:*

How **important** do you perceive the following **factors** when you are in the process considering to make a capital investment abroad?

FACTORS	Extremely important	Highly important	Moderately important	Little important	Not important
TAXATION CONSIDERATIONS					
2.1 Taxation in the country of the home company					
2.2 Taxation in the country of the foreign company					
2.3 The establishment of a controlled foreign company					
2.4 The use of a residence based or source based principle of taxation by a foreign country					
2.5 The event of double taxation without any recourse from countries					
2.6 The use of either unilateral relief agreement between countries					
2.7 The response to tax incentives offered by countries to induce foreign direct investment					
2.8 Appeal of a tax exemption as an incentive to invest					
2.9 Appeal of a reduction in the rate of taxation to be used in the foreign country as an incentive to invest (excluding tax havens)					
2.10 Undertaking a capital investment in an international tax haven					
2.11 Appeal of a deferral of the tax liability to a later time as an incentive to invest					
2.12 The use of thin capitalization from the home country and debt from the foreign country					
2.13 Other (Please specify):					
INTEREST RATE, INFLATION RATE AND EXCHANGE RATE CONSIDERATIONS					
2.14 The foreign inflation rate in comparison to the home country's inflation rate					
2.15 The extent to which foreign exchange rates between countries need be considered					
2.16 The relationship between exchange rates and inflation rates in the home as well as the foreign country					
2.17 The level of interest rates in relation to the home country's interest rate					
2.18 The relationship between inflation rates and the interest rates which will impact on the real interest rates in the home and foreign country					

FACTORS	Extremely important	Highly important	Moderately important	Little important	Not important
2.19The availability of foreign financing relative to the home country					
2.20 Other (please specify):					
COST OF CAPITAL, CAPITAL STRUCTURE AND FINANCIAL LEVERAGE CONSIDERATIONS					
2.21 The consideration given to the existing capital structure and planned capital structure of the home company compared to the foreign company					
2.22 The realization of the net asset value of the home and foreign company's assets to provide security for debt financing					
2.23 Future growth of the home company compared to the foreign company					
2.24 Income variability and cash flow variability of the home company compared to the foreign company					
2.25The effect of financial leverage on the home company compared to the foreign company					
2.26 Other (please specify):					
LABOUR AND CAPITAL INTENSITIES					
2.27 The degree of operating leverage used within the home company compared to the foreign company					
2.28 The degree of business risk experienced by the home company compared to the foreign company					
2.29 The level of capital intensities used by the home company compared to the foreign company					
2.30 The level of labour intensities used by the home company compared to the foreign country					
2.31 Other (please specify):					

FACTORS	Extremely important	Highly important	Moderately important	Little important	Not important
FINANCIAL RATIO ANALYSIS					
2.32 The effect of cash flow in the home company and foreign company					
2.33 Liquidity within the home and foreign company					
2.34 Consideration of solvency in the home company and foreign company					
2.35 Profitability of the home company and foreign company					
2.36 Other (please specify):					

3. Please indicate the most important **problem areas** in the process of considering making capital investments abroad and provide possible **solutions** for the related problem areas.

Problem areas	The **five** most important **problem areas** according to your perception (*Please make crosses in the applicable blocks.*)	Possible **solutions** for the **five** related problem areas (*Please provide brief descriptions of each of the solutions.*)
3.1 Being taxed within the home and foreign country		
3.2 The lack of incentives offered by possible foreign countries		
3.3 Extremely high tax rates enforced by foreign countries		
3.4 Stringent regulations of the use of thin capitalization		
3.5 Excessive inflation experienced in foreign countries		
3.6 Escalation in costs, eroding profits and cash flows		
3.7 Managing and hedging foreign exchange rate risks		
3.8 Financing availability in the foreign country		
3.9 Lack of reliable information regarding the economic environment of the foreign country		
3.10 Restrictions placed on the cross-border movement of capital between the home and foreign companies		
3.11 Inability to apply operating leverages		
3.12 Inability to obtain and apply capital intensities		
3.13 Unavailability of enough labourers in the foreign market		
3.14 Low labour productivity and high labour costs in the foreign market		
3.15 High levels of financial leverage used within the foreign company structure		
3.16 Other (please specify):		

4. *Please make crosses in the applicable blocks (where always / very often / sometimes / seldom / never forms a continuum) when you answer the following question:*

How **often** do you **adjust** the **factors** to be in line with needs and practices of the foreign country and companies?

Stipulations	*Always*	Very often	Some-times	Seldom	Never
4.1 Use financial instruments to hedge the foreign exchange rate risk experienced					
4.2 Use of equity and/or debt to achieve the target capital structure to achieve an acceptable level of profitability					
4.3 The degree of capital intensities					
4.4 The degree of labour intensities					
4.5 The cost structure of the company with respect to operating leverage					
4.6 The liquidity or cash holdings of the home and foreign company					
4.7 The solvency needs of the home and foreign company					
4.8 To lengthen the intended lifespan of the capital investment abroad					
4.9 To shorten the intended lifespan of the capital investment abroad					
4.10 Other (please specify):					

5. Could you please provide the answer to the following questions?

Questions	
5.1 What is the ***average*** lifespan of a typical capital investment abroad with which your company is involved	
5.2 How long has your company been ***involved*** in making capital investments abroad	
5.3 The number of ***total employees*** currently employed by your ***group of companies***	
5.4 The number of ***permanent employees*** currently employed by your ***group of companies***	
5.5 What is the ***amount of total assets*** in rands of your ***group of companies***	

Thank you for your co-operation

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